ACRP Graduate Research Award Program

STUDENT BIOGRAPHIES

September 2020

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About ACRP

The ACRP (Airport Cooperative Research Program) Graduate Research Award (GRA) is intended to stimulate thought, discussion, and research by those who may become the future airport managers, operators, designers, and policymakers in aviation. The focus of this graduate student research program is on applied research on airport and related aviation system issues to help the public sector continue to improve the quality, reliability, safety, and security of the U.S. civil aviation system well into the foreseeable future.

Airports are vital national resources. They serve key roles in the transportation of people and goods and in regional, national, and international commerce. They are where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry.

The ACRP carries out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing federal research programs. The need for ACRP was identified in *TRB Special Report 272: Airport Research Needs: Cooperative Solutions (March 2003),* based on a study sponsored by the Federal Aviation Administration (FAA). The ACRP undertakes research and other technical activities in a variety of airport subject areas, including design, construction, maintenance, operations, safety, security, policy, planning, human resources, and administration.

The Graduate Research Award offers a stipend as well as the opportunity for the student's final research paper to be published in the *Transportation Research Record* and to present their work at the Transportation Research Board's Annual Meeting. In addition to the faculty research advisor at the students' institutions, students benefit from expert advisors assigned by the ACRP to mentor the student during the research process. The ACRP GRA Program is sponsored by the FAA through the ACRP and managed by the Virginia Space Grant Consortium.

Shivam Arora

University of Texas at Arlington

M.S. Student

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Shivam Arora graduated in May 2019 with dual M.S. degrees in Accounting and Business Analytics from the University of Texas at Arlington. He received his B.B.A. degree in Accounting and Finance from the same university. Shivam has published three scholarly research papers and one practitioner paper. He works closely with Dr. David Rakowski, his research mentor from the UTA Department of Finance and Real Estate. Shivam's research interests primarily revolve around financial modeling and statistical relationships in the financial markets but also include novel cost accounting methods and Robotic Process Automation.

Shivam is currently a Technology & Transformation Consultant. He uses data mining and machine learning techniques to automate key tax processes, build analytical models to explore relationships and identify best use practices.

During the program year 2018-2019, Shivam won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "What Determines the Valuation of Airport Bonds?

Stephanie Atallah

Virginia Polytechnic Institute and State University

Ph.D. Candidate

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Stephanie Atallah is a doctoral candidate in the Civil and Environmental Engineering Department at Virginia Tech, working under the advisement of Dr. Susan Hotle. She earned an M.S. (2017) in Civil and Environmental Engineering from Virginia Tech and a B.E. in Civil Engineering (2015) from the Lebanese American University in Beirut, Lebanon. Her research focuses on a number of aviation topics including delay propagation and Key Performance Indicators, the evolution of low-cost carriers in the U.S. domestic market and air service continuity in small communities.

During the program year 2017-2018, Stephanie won the Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "An Assessment of Contributing Factors to Air Service Loss in Small Communities." In 2018, she won the Helen Overly Memorial Scholarship from the Women's Transportation Seminar Central Virginia Chapters and in 2019, she was awarded the Edward Beale Civil Engineering Fellowship.

Jacob Avery

Massachusetts Institute of Technology

M.S. Student
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Jacob Avery is an M.S. student at the Massachusetts Institute of Technology (MIT) in the Department of Aeronautics and Astronautics. Prior to that, he received a B.S. in Mechanical Engineering with highest honors at the University of Illinois at Urbana-Champaign. Jacob currently works in the MIT International Center for Air Transportation Laboratory under Professor Hamsa Balakrishnan. Jacob's research interests at MIT focus on using machine learning algorithms, network theory, and discrete choice approaches to model airport operations and to characterize delay in the National Airspace System.

Currently, Jacob is applying discrete choice modeling approaches to develop objective functions that describe the runway configuration selection process for air traffic control personnel. These objective functions are then used to predict the runway configuration over a specified planning horizon, which is a key component for airport capacity predictions.

During the program year 2014-2015, Jacob won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Data-driven Modeling and Prediction of the Runway Configuration Selection Process."

Ameya Behere

Georgia Institute of Technology

Ph.D. Student

Atlanta, GA

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Ameya Behere is a doctoral student at the School of Aerospace Engineering at Georgia Institute of Technology. Prior to graduate school at Georgia Tech, Ameya completed his Bachelor's and Master's Degree in Aerospace Engineering from the Indian Institute of Technology – Bombay in India. For his Master's thesis, he worked on analyzing the effects of introduction of a high speed rail network on the domestic air travel market.

Ameya's present work includes modeling and simulation of aviation related noise events, particularly takeoffs and the evaluation and optimization of mitigation techniques. As a Senior Graduate Researcher at the Aerospace Systems Design Lab, he has worked on multiple FAA projects through the Aviation Sustainability Center. His broader research interests include systems design optimization and transportation system modeling.

During the program year 2018-2019, Ameya won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Optimization of Takeoff Departure Procedures for Airport Noise Mitigation."

Benjamin Bacon

Auburn University

Ph.D. Student

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Benjamin Bacon, M.S., E.I.T., is currently enrolled in Auburn University's Department of Civil Engineering.

For the past two years, his primary research has been in support of developing a long-range transportation model for the Federal Highway Administration. During this time he has also conducted a multitude of other research endeavors including studies into paratransit behavior, the role of geographic scale on travel decisions, and the impact of bike boxes on intersection level of service.

Prior to beginning his studies laur at Auburn, Benjamin served in the 82ND Airborne Division and deployed to Afghanistan, Iraq, and mobilized in support of Hurricane Katrina recovery operations. He is currently serving as Company Commander for a horizontal engineer unit located at Fort Benning, Georgia.

Achievements and awards include the Box Fellowship, the Eisenhower Fellowship, and he is currently the Vice-President of the Auburn University Chapter of the Institute of Transportation Engineers.

During the program year 2014-2015, Benjamin won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "A Typology of Travelers Based on Their Annual Intercity Travel Patterns Using the 2013 Longitudinal Survey Of Overnight Travel."

Raunak Bhattacharyya

Stanford University

Ph.D. Candidate

Stanford, CA

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Raunak Bhattacharyya is a doctoral candidate in the Department of Aeronautics and Astronautics at Stanford University. He is a Graduate Research Assistant in the Stanford Intelligent Systems Laboratory and is affiliated with the Center for Artificial Intelligence Safety. His current research interests include reinforcement learning and planning under uncertainty in safety-critical domains such as aviation and autonomous driving. Prior to starting the Ph.D. program at Stanford, Raunak obtained Master's degrees in Computer Science and Aerospace Engineering from the Georgia Institute of Technology. At Georgia Tech, Raunak was a Graduate Research Assistant in the Cognitive Engineering Center where his research was focused on human-automation interaction in NextGen Air Transportation Systems. Raunak obtained his Bachelor's degree (with honors) in Aerospace Engineering from the Indian Institute of Technology Bombay.

During the program year 2017-2018, Raunak won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Design Process for Novel Concepts of Operation in Thin-Haul Aviation to Increase Airport Throughput."

Sarah-Blythe Ballard

Johns Hopkins

MD, MPH, Ph.D.

Baltimore, MD

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Sarah-Blythe Ballard is a Lieutenant Commander in the U.S. Public Health Service, currently serving as an Epidemic Intelligence Service Officer at the Centers for Disease Control and Prevention in Atlanta, Georgia. Since 2011, she has been conducting aviation safety research with the Hopkins Center for Injury Research and Policy, where she has published multiple first-authored articles about the public health risks associated with air tour crashes of helicopters, airplanes, and hot-air balloons. Sarah-Blythe holds an M.D. from Emory University and an M.P.H. and Ph.D. from Johns Hopkins. She completed her Preventive Medicine Residency at Johns Hopkins and is board certified in Aerospace and General Preventive Medicine.

Previously, Sarah-Blythe served as the Command Flight Surgeon for Marine Heavy Helicopter Squadron 362 in Camp Bastion, Afghanistan, and the Senior Medical Officer in charge of the Third Marine Aircraft Wing (Forward) Flight Line Aid Station. In addition, she has led humanitarian assistance and disaster relief missions in the Pacific Region as an American Red Cross physician acted as military liaison to the Dhi Qar Provincial Reconstruction Team in Iraq and completed civic action projects in Venezuela, Peru, and Djibouti.

Sarah-Blythe's aviation-related awards include two Individual Strike/Flight Air Medals, the Richard E. Luehrs Navy-Marine Corps Flight Surgeon of the Year Award, the Chief of Naval Operations Safety Award, and the John Stapp Prize in Transportation Policy.

While a graduate student at the Johns Hopkins University, Sarah-Blythe won an award as part of the ACRP Graduate Award Program on Public Sector Aviation Issues for the program year 2013-2014, preparing research on "Epidemiology and Public Health Risks Associated With Air Show-Related Morbidity and Mortality."

Dan Boedigheimer

Advanced Aircrew Academy

CEO

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Dan Boedigheimer is the CEO and a founding partner in Advanced Aircrew Academy. Dan has held positions as an FAA Aircraft Program Designee, Pilot Proficiency Examiner, Check Airman, Instructor Pilot, Flight Standards Manager, and Training Manager for Part 135 Air Carriers. He is also a Human Factors Lead Facilitator and consultant for Convergent Performance. Dan holds a Bachelor's degree in Aviation Management from Minnesota State University, a Master's degree in Aviation Safety from Embry Riddle Aeronautical University, and a Ph.D. in Aerospace Science from North Central University.

Dan is a member of the Delta Mu Delta Academic Honor Society and holds an Airline Transport Pilot certificate with over 5,000 hours of flight experience in business jets. Dan is the training and standards lead for the National Business Aviation Association (NBAA) Safety Committee, the International Business Aviation Council's IS-BAO Standards Board training subject matter expert, and a reviewer for the Embry Riddle Journal of Aviation/Aerospace Education & Research.

In addition to speaking at Bombardier's Safety Standdown, Aviation Human Factors and SMS Conference, NBAA regional forums, Global Aerospace SM4 Aviation Safety Seminars, and Aviation Week's Fatigue Management Forum; Dan has authored two books, UC Systems, and UE Systems, describing the complete systems components of the Beech 1900D Airliner.

During the program year 2017-2018, Dan won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Exploring Pilot Reliability Certification Program and Changing Attitudes on the Reduction of Errors in FAR 91 and 135 Pilots." He is also a 2018 Dr. Tony Kern Professionalism in Aviation Award recipient.

Yashovardhan Chati

Massachusetts Institute of Technology
Doctoral Student
Cambridge, MA
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Yashovardhan Chati is a doctoral student at the Massachusetts Institute of Technology (MIT) in the Department of Aeronautics and Astronautics. He works in the MIT International Center for Air Transportation with Professor Hamsa Balakrishnan. Prior to coming to MIT, he received his Master of Technology and Bachelor of Technology degrees in Aerospace Engineering from the Indian Institute of Technology (IIT) Bombay in 2012. Yashovardhan's doctoral research at MIT focuses on using machine learning algorithms to model aircraft performance. The high-level aim of his research is to develop statistical models which can estimate aircraft fuel flow, fuel burn, and takeoff weight given its flight trajectory information. These models can help evaluate the fuel burn and emissions impact of different routes and operational procedures.

Yashovardhan has received the IIT Bombay Institute Gold Medal in 2012 for being the most outstanding graduating student, and the best paper award in the USA/Europe Air Traffic Management Research and Development Seminar 2017.

During the program year 2016-2017, Yashovardhan won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "*Data-Driven Modeling of Aircraft Engine Fuel Burn in Climb Out and Approach.*"
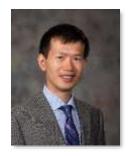
Kanthasamy Chelliah

Amazon Lab126

Applied Scientist – Amazon Echo

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Kanthasamy Chelliah is an Applied Scientist at Amazon developing acoustic algorithms for Alexa. He worked as a Postdoctoral Scientist at Argonne National Laboratory at Energy Systems Division prior to joining Amazon. His research areas include computational acoustics, microphone array processing, and Computational Mathematics. He received his Ph.D. (Aug 2016) from the Department of Mechanical, Materials and Aerospace Engineering, Illinois Institute of Technology (IIT), Chicago, IL. He was also working as a research assistant at the fluid dynamics research center of IIT dealing with the development and implementation of acoustic source localization techniques such as acoustic holography and beamforming from 2011-2016. His dissertation title is "Leakage Detection Techniques Using Nearfield Acoustic Holography".

Prior to starting his Ph.D., Kanthasamy obtained his Master's degree in Mechanical Engineering from Indian Institute of Technology Madras, Chennai, India. His Master's thesis dealt with the effect of vibrations on the characteristics of reacting flows. He graduated with his undergraduate degree in Aerospace Engineering from Anna University, India in 2008. Kanthasamy is currently a member of The Acoustical Society of America. He has published six papers in peer-reviewed journals and 15 papers in the proceedings of various international conferences.

During the program year 2014-2015, Kanthasamy won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "A Demonstration of the Possibilities of Using a Phased Microphone Array as the Next Generation Airport Noise Monitoring System."

Heng Chen

University of Nebraska–Lincoln

Assistant Professor
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Heng Chen is an Assistant Professor of Supply Chain Management & Analytics in the College of Business Administration at the University of Nebraska-Lincoln. He received his Ph.D. in Management Science from the University of Massachusetts Amherst in 2016, his M.S. degree in Mathematics from the University of Massachusetts Amherst in 2011, and his B.S. degree in Applied Mathematics from Huazhong University of Science and Technology, where he graduated with distinction in 2008. Heng's primary research interest is in Air Transportation, which involves analyses of large-scale air traffic data and their utilization through stochastic modeling and optimization. His secondary research interest involves newly arising supply chain management problems resulting from the use of unmanned aircraft systems (UAS) technology.

Heng's honors and awards include the INFORMS Transportation Science & Logistics Society Outstanding Paper in Air Transportation, the INFORMS Aviation Applications Section Best Student Presentation Award and the Outstanding Doctoral Student Researcher Award from the Isenberg School of Management.

During the program year 2014-2015, Heng won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Value of Extended Time-based Metering for OPD Operations."

Sophine Clachar, Ph.D

University of North Dakota

Data Scientist

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Sophine Clachar received her doctorate in Scientific Computing from the University of North Dakota (UND) under the tutelage of Dr. Travis Desell and Prof. James Higgins. Originally from St. Catherine, Jamaica, Sophine completed her M.S. in Computer Science from UND and her B.S. in Computing and Information Technology from the University of Technology, Jamaica. In her graduate studies, she participated in two research endeavors that focused on aviation safety: 1) Identifying anomalous flight patterns and accident precursors for the General Aviation Flight Information Database and, 2) Verification and validation of an air truth system that governed the operation of Unmanned Aerial Vehicles in the US National Airspace.

During the program year 2013-2014, Sophine won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Identifying and Analyzing Atypical Flights Using Supervised and Unsupervised Approaches."

Boris Claros

University of Missouri - Columbia

Ph.D. Candidate

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Boris Claros is a doctoral candidate in Civil Engineering at the University of Missouri. Boris completed his MSCE degree as a Fulbright Scholar also at the University of Missouri - Columbia. In his Master's thesis, he worked on evaluating operations of signalized roundabouts. As part of his doctoral dissertation, he has studied the safety of the Diverging Diamond Interchange (DDI), J-turn intersection, automated enforcement (red-light camera). Boris presented the first comprehensive safety evaluation of the DDI in the United States showing the safety benefits of this new innovative interchange. To mention some, the American Association of State Highway and Transportation Officials (AASHTO) awarded this research the "Sweet Sixteen" award for high-value research nationwide. Also, the Operational Effects of Geometrics Committee of the Transportation Research Board of the National Academies awarded this research "Best Paper Award" of 2015. The research on the J-turn intersection focused on safety evaluation and design guidance of U-turn spacing with observed crashes and simulation. The study of red-light cameras focused on safety evaluation, crash cost-benefit, and legal issues research in Missouri. Boris' dissertation also contributes to guidance on crash reports review and assignment. In Missouri, he found that crash data has several issues, especially at interchange facilities that require data correction. He reviewed over 15,000 crash reports and directed another 11,000 crash report reviews in different research projects. Although his dissertation offers significant a contribution in roadway Transportation, Boris has pursued to apply this well-established methodology in a different mode of Transportation such as airfield safety. There is not a specific prediction methodology for runway incursions which are a major concern for runway safety analysis.

During the program year 2015-2016, Boris won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Enhancing Safety Risk Management with Quantitative Measures."

Regina Clewlow

UC Davis Institute of Transportation Studies
Research Scholar
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Regina Clewlow, Ph.D. is the Director of Transportation Research and Policy for RideScout, Enterprise Solutions, and is also a Research Analyst with the UC Davis Institute of Transportation Studies. In addition, she is a Research Scholar at the Stanford University Precourt Energy Efficiency Center, working with the Future Mobility initiative. Prior to these current appointments, Dr. Clewlow was a Postdoctoral Scholar at UC Berkeley in the Institute of Urban and Regional Development, where her research focused on developing advanced behavioral models of Transportation and household choices, in order to improve large-scale simulation models of land use, travel demand, and the environment. She received her Ph.D. from the Engineering Systems Division at the Massachusetts Institute of Technology (MIT) in September 2012. Her doctoral dissertation examined the demand for high-speed rail and air transportation systems, the environmental impacts of these systems, and their performance under climate policies. Regina's broader research interests include building an improved understanding of the factors that shape Transportation and energy demand, through interviews, surveys, and econometric techniques.

Prior to starting graduate school at MIT, Regina co-founded the nonprofit organization Engineers for a Sustainable World, where she served as Executive Director from 2002 to 2008. She received her B.S. in Computer Science and M.E. in Civil & Environmental Engineering from Cornell University.

Regina is the recipient of an MIT Energy Fellowship (2008), MIT Martin Family Sustainability Fellowship (2010), Dwight D. Eisenhower Graduate Transportation Fellowship (2010) and EPA STAR Graduate Fellowship (2011).

During the program year 2010-2011, Regina won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Interaction of High-Speed Rail and Aviation: Exploring Air-Rail Connectivity."

Tara Conkling

Mississippi State University

Ph.D. Candidate

Starkville, MS

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Tara Conkling is a doctoral candidate in the Department of Wildlife, Fisheries, and Aquaculture and a member of the Agricultural Ecology Laboratory at Mississippi State University. Her dissertation examines aviation risk, habitat use and productivity of grassland bird species in the Black Belt Prairie region of eastern Mississippi. Tara received her B.S. degree with a dual major in Wildlife Biology and Biology and a secondary major in Natural Resources and Environmental Science from Kansas State University and her M.S. degree in Wildlife and Fisheries Sciences from Texas A&M University. Her research interests include avian ecology, predator-prey dynamics, and human-wildlife conflicts.

During the program year 2013-2014, Tara won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Avian non-identification for Aviation Strikes."

Elizabeth Connelly

National Renewable Energy Laboratory

Transportation and Hydrogen Systems Engineer
Golden, CO
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Elizabeth Connelly graduated from Furman University in 2011 with Bachelor's degrees in Mathematics and Economics. She received her M.S. (2013) and Ph.D. (2015) from the Department of Systems and Information Engineering at the University of Virginia, where she worked as a research assistant in the Center for Risk Management of Engineering Systems. Her dissertation topic involved integrating risk analysis methods with environmental life cycle assessment to produce a research and development roadmap for aviation biofuels.

Elizabeth joined the National Renewable Energy Laboratory in 2016, working on alternative fuel analysis, including hydrogen supply chains. She is currently on detail to the U.S. Department of Energy Fuel Cell Technologies Office, where she manages research and development projects to enable large-scale, low-cost, and sustainable hydrogen production and utilization. She recently won an award for "for exceptional efforts and visionary leadership on the groundbreaking H2@Scale initiative."

During the program year 2014-2015, Elizabeth won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Resilience Analytics of a Future Supply Chain for Aviation Biofuels."

Joseph W. Daniels, III

University of Arkansas

Ph.D. Candidate
Fayetteville, AR
Email: jwdaniel@uark.edu

Joseph W. Daniels, III is a doctoral candidate in Civil Engineering at the University of Arkansas. Joseph is a graduate of North Carolina A&T State University, where he received a B.S. degree in Civil Engineering. He is a native of Silver Spring, Maryland.

Joseph is conducting research on heated pavement systems with a focus on airfield pavements. He is seeking to incorporate sustainable practices and renewable energy to his research approach for cost efficiency, system longevity, and environmental protection.

From Joseph's research efforts, he was awarded the Secretary of Transportation's RAISE Award and the Dwight D. Eisenhower Transportation Fellowship. Daniels is published in the International Journal for Pavement Engineering and has presented to the Northwest Arkansas Regional Airport's leadership and operations team and at multiple conferences. He also presented his research at the 2016 TEDxKnoxville: Without Limits event hosted by the Garrett A. Morgan Technology and Transportation Educational Program Clearinghouse.

During the program year 2017-2018, Joseph won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Development of Anti-Icing Airfield Heated Pavement System Using Solar Energy."

Gabriela DeFrancisci

University of California at San Diego

Graduate Researcher
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Gabriela DeFrancisci received her B.S. (2008) from California Polytechnic State University, San Luis Obispo's Department of Civil Engineering. She received her M.S. (2010) and received her Ph.D. at the University of California, San Diego in Structural Engineering in 2013. In 2008, she received the UCSD Structural Engineering Department Fellowship.

Gabriela was a California Space Grant Fellowship Recipient in 2010. Gabriela conducts her multi-faceted research for the FAA Joint Center of Excellence for Advanced Materials and Structures which is sponsored by the FAA Office of Aviation Research at the FAA Wm. J. Hughes Technical Center. Her project involves interactions with various aspects of the aviation industry including the airframers, the airline operators and material suppliers, as well as FAA and EASA.

Gabriela's main research area is a wide area, blunt impact on composite structures, similar to accidental contact between a ground service vehicle and a commercial aircraft. Her dissertation is entitled "High Energy, Wide Area, Blunt Impact on Composite Aircraft Structures" which has very strong implications related to safety and detection of damage in the new generation of composite airframes.

During the program year 2009-2010, Gabriela won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Low-Velocity, High Mass, Wide-Area Blunt Impact on Composite Panels."

Timothy Divoll

Indiana State University

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Timothy Divoll is a doctoral student in Biology at Indiana State University. Prior to starting that in 2014, he received an M.S. in Biology at the University of Southern Maine in Portland, Maine, and a B.S. in Biology at Worcester State University in Massachusetts.

Timothy's research focuses on the foraging ecology of endangered bats—how they select and use foraging habitat, how they interact with their prey, and how they respond to changes on the landscape—in human-modified habitats in central Indiana. His current project investigates how a colony of Indiana bats (*Myotis sodalis*) responded to the development of new runways, highway interchanges, commercial development, and creation of mitigation habitat near the Indianapolis International Airport over a 20-year period, 1997–2016. Timothy has studied bat ecology since 2007 and has been involved in endangered bat presence/absence surveys for domestic gas and oil development in the eastern US since 2009.

During the program year 2016-2017, Timothy won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Airport Expansion and Endangered Bats: Development and Mitigation Actions Near the Indianapolis International Airport."

Derek Doran

Tenet3

Director of Research and Development

Dayton, OH

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Derek Doran has a joint appointment as a tenured Associate Professor in the Department of Computer Science & Engineering at Wright State University and as Director of Research at Tenet3 LLC in Dayton, OH. He leads a team of AI and Cybersecurity researchers in supporting U.S. Air Force and related DoD projects while directing the Web and Complex Systems Research Lab at Wright State. Derek was recently selected to serve as a U.S. Fulbright Scholar for Iceland in early 2020. He received his Ph.D. from the University of Connecticut in 2014, is a National Science Foundation East-Asia and Pacific Summer Institutes Fellow, was a twice Summer Alumni of Bell Labs, a visiting researcher at the Dependable Distributed Systems and Networks Lab at National Taiwan University, and Interim Researcher in the (Big) Data Analytics team at ABB U.S. Corporate Research.

During the program year 2012-2013, Derek won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "An Analytic Model of Airport Security Checkpoint Screening Times."

Jeff Eloff

Sonic Automotive Inc.
Operations Research Specialist
Charlotte, NC
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Jeff Eloff is currently employed with Sonic Automotive, providing industry analysis, business forecasts, and assistance in the development of new and used automotive vehicle pricing and inventory optimization, models. He holds a Master's degree in Economics with a specialization in Applied Econometrics and received his Ph.D. in the Spatially Integrated Social Science program from the University of Toledo in December 2014. Jeff's dissertation addressed the interplay between publicly-funded Transportation investments and the spatial economy.

While a graduate student at the University of Toledo, Jeff won an award as part of the ACRP Graduate Research Award Program for the program year 2013-2014, preparing research on "Airport Infrastructure Investments in Light of Network Effects."

Alexander Estes

University of Minnesota

Industrial Postdoctoral Fellow

Minneapolis, MN

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Alex Estes is an Industrial Postdoctoral at the Institute for Mathematics and its Applications at the University of Minnesota. His main research interests lie in the field of optimization, especially in stochastic combinatorial optimization problems and problems that lie at the intersection of machine learning and optimization. Alex is also interested in applications of these techniques in Transportation and health care. He completed a Ph.D. in Applied Mathematics & Statistics and Scientific Computing at the University of Maryland College-Park. His advisor was Michael Ball, and his dissertation research applied stochastic optimization and machine learning techniques to the problem of planning ground delay programs.

During the program year 2015-2016, Alexander won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Data-Driven Ground Delay Program Planning."

Daniel Favarulo

Maryland Department of Transportation

Contracting Officer
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Dan Favarulo was a member of the 2008-2009 ACRP's Graduate Research Award Program where he completed research on the non-fiscal barriers to airport development. Dan currently works for the Maryland Department of Transportation's Office of Planning & Capital Programming. He is responsible for property management of the Baltimore/Washington International Thurgood Marshall Airport (BWI) terminal space as well as coordination with air carriers on various lease agreements and airport operation issues. Prior to his work with the MAA Dan worked for the Federal Aviation Administration's (FAA) Office of Airports as a Program Analyst in the Airport Improvement Program (AIP) Branch. Dan specifically formulated the AIP budget, calculated and briefed management on budget forecasts, developed and coordinated program eligibility and financial guidance, and reviewed and approved capital project grants. Dan received his M.A. in Transportation Policy, Operations and Logistics from George Mason University and his B.A. in Politics from the Catholic University of America.

Doug Fearing
University Texas at Austin
Assistant Professor
Austin, TX
Email: doug.fearing@gmail.com

Douglas Fearing is the Founder and President of Zelus Analytics, an Austin-based sports analytics startup creating the world's best sports intelligence platform. Prior to founding Zelus, he spent four seasons building the Research and Development (R&D) department for the Los Angeles Dodgers of Major League Baseball. In his role as the Director of R&D, Doug was responsible for long-term initiatives in software engineering, data science, and sports science to support the player acquisition, in-game strategy, and player development.

Doug started with the Dodgers in 2015 while an Assistant Professor in Operations Management at The University Texas at Austin's McCombs School of Business. Prior to joining McCombs, he spent three years as a tenure-track faculty member of Harvard Business School's Technology and Operations Management group. Between the two universities, Doug taught courses to students across levels, including undergraduate, full-time MBA, doctoral, and executive MBA. His academic research was focused on developing and applying analytical techniques for data-driven decision-making in the airline industry, sports management, and logistics. His paper on coordinating air traffic-flow management programs was awarded the Anna Valicek Medal by the airline industry group AGIFORS and his dissertation on air traffic flow management received the INFORMS Aviation Application Section Dissertation Prize. He also applied performance evaluation techniques to sports management, and his coauthored work in golf putting performance was highlighted in The Wall Street Journal and Slate. In 2013, he and a coauthor won the Alpha Award for Best Research Paper at the MIT Sloan Sports Analytics Conference for research on flexibility in baseball roster construction. Based on his sports management research, he has consulted for Titleist and served as a Senior Advisor to Baseball R&D for the Tampa Bay Rays.

Doug received his Ph.D. in Operations Research from the Massachusetts Institute of Technology under the guidance of Professor Cynthia Barnhart. After earning his Bachelor's degree in Computer Science with honors at Carnegie Mellon University, he spent five years at Trilogy Software in Austin, Texas, working on engagements with Fortune 500 customers.

During the program year 2009-2010, Doug won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Evaluating Air Traffic Flow Management in a Collaborative Decision-Making Environment."

Neil Feinberg

US EPA

General Engineer

Raleigh-Durham

Email: neil.feinberg@gmail.com

Mr. Neil Feinberg is a doctoral candidate at Washington University in St. Louis in the Department of Energy, Environmental and Chemical Engineering. His expertise includes air quality field measurements, emissions estimation, and air quality dispersion modeling, and receptor-based modeling. His research primarily focuses on the refinement of methodologies to estimate near-field impacts from emission sources. This work includes Transportation emission sources with activities that are difficult to spatially and temporally allocate such as rail yard and airport operations.

During the program year 2011-2012, Neil won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Dispersion Modeling of Lead Emissions from Piston-Engine Aircraft at General Aviation Facilities."

Makarand Gawade

HDR, Inc.

Data Scientist

Tallahassee, FL

Email: Makarand.Gawade@hdrinc.com

Mr. Makarand Gawade is currently a Transportation Planner/Data Scientist at HDR, Inc. and a doctoral candidate in Civil and Environmental Engineering at the University of South Florida. His expertise includes freight data analysis, modeling, pedestrian/bicyclist safety, and network science. He has worked on multiple projects with the Florida Department of Transportation on freight issues and data management. His expected date of graduation is May 2019. His dissertation topic is related to quantifying the performance of freight networks.

During the program year 2014-2015, Makarand won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Synthesis of Remote Air Traffic Control System and Air Traffic Controllers' Perceptions."

Benjamin Goodheart

Versant

Managing Director

Evergreen, Colorado

Email: bgoodheart@safetyforhumans.com

Dr. Benjamin Goodheart has worked in aviation since the mid-1990s. He is an active pilot and holds a multi-engine Airline Transport Pilot certificate. Previously, Benjamin managed flight training for an aviation university. He currently serves as Manager Director of Versant, a global aviation safety consultancy.

Benjamin holds an undergraduate degree in Aeronautical Science, and a Master's degree in Safety Science completed his Ph.D. at Embry-Riddle Aeronautical University. His professional and research interests include safety management system review and development, organizational culture and change management, and probabilistic system review and development.

During the program year 2012-2013, Benjamin won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Identification of Causal Paths and Prediction of Runway Incursion Risk Using Bayesian Belief Networks."

Sreeta Gorripaty

Uber

Senior Data Scientist

San Francisco, CA

Email: sreetasai@gmail.com

Sreeta Gorripaty is a Sr. Data Scientist at Uber working in the Dynamic Pricing and Matching team. At Uber, Sreeta focuses on using Machine Learning and optimization techniques to develop algorithms for transportation applications in the areas of travel time prediction, pool matching, and dynamic pricing algorithms. Prior to Uber Sreeta pursued her Ph.D. at the University of California, Berkeley, in Transportation Engineering. Sreeta did her M.S. in Transportation Engineering at UC Berkeley and B.S. in Civil Engineering at the Indian Institute of Technology Bombay. At Berkeley, Sreeta was working on developing algorithms to find similar days at an airport to develop decision-support tools and uses data mining techniques to improve the airport planning process. She has also worked with Apple Maps to develop an evaluation framework to improve their routing algorithms using user data.

Sreeta's accolades include the WTS Beverley Swaim Staley Leadership Legacy Scholarship.

During the program year 2015-2016, Sreeta won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Representative Weather Profiles in Airport Planning."

Yue Gu

University of South Australia

Lecturer

West Lafayette, IN

Email: yuegu@alumni.purdue.edu

Yue Gu is currently working at the University of South Australia as a Lecturer in Aviation. Yue graduated from Purdue University in 2019 with a Ph.D. in Technology. He received his M.S. (2016) in Aviation and Aerospace Management from the School of Aviation and Transportation Technology at Purdue University and B.S. in Aviation Management from Louisiana Tech University. His research areas are general aviation safety, airport operation, and airport sustainability primarily focused on airport operational sustainability.

Yue interned at Monroe Regional Airport in Louisiana as an airport director assistant and interned as an aircraft mechanic at Hainan Airlines in Taiyuan, China. He received the Ross Fellowship from Purdue University and the 2018 Outstanding Student Researcher Award from PEGASAS, the FAA Center of Excellence for general aviation research.

During the program year 2018-2019, Yue Gu won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Defining Airport Operational Sustainaiblitly for U.S. General Aviation Airports."

Maria C. Guercio, Ph.D., PE

Federal Highway Administration
Eastern Federal Lands Highway Division
Civil Engineer (Pavements)
Sterling, VA
Email: Maria.Guercio@dot.gov

Maria Guercio is currently a Pavement Engineer at the Federal Highway Administration, Eastern Federal Lands Highway Division which addresses the transportation needs of Federal and Indian lands through partnership and cooperative agreements with state and local governments and other federal agencies. She previously served as a Project Manager at The Transtec Group providing pavement engineering services nationally and internationally. She worked on Design/Build and Public-Private Partnership Transportation projects. She completed her Ph.D. dissertation in Civil Engineering at Villanova University near Philadelphia, Pennsylvania. Her research emphasis was on energy-conscious and alternative asphalt mixtures for airfield pavements on aprons and taxiways. Maria completed her B.S. in Architectural Engineering (Atructural concentration) at Drexel University in 2011 and her M.S. in Civil Engineering (Transportation focus) at Villanova University in 2012.

While a graduate student at Villanova University, Maria won an award as part of the ACRP Graduate Award Program for the program year 2013-2014, preparing research on, "The Performance of Energy Conscious Materials in Flexible Airfield Pavements." In addition, she was involved in two key NCHRP projects: NCHRP Project 9-22B *Comparing HMA Dynamic Modulus Measured by Axial Compression and IDT Methods* and NCHRP Project 20-07 Task 317 *Update of "Mechanistic-Empirical Pavement Design Guide Manual of Practice"*. She has also assisted in the preparation of the National Highway Institute Course # 131023 "*Highway Materials Engineering, Module E – Pavement ME Design*."

Osman E. Gungor

The University of Illinois at Urbana-Champaign
Doctoral Student
Champaign, IL
Email: gungor2@illinois.edu

Osman E. Gungor received a B.S. degree in Civil Engineering from Middle East Technical University, Ankara, Turkey, in 2012 and an M.S. degree in Civil Engineering from the University of Illinois at Urbana-Champaign, USA, in 2015. He is currently pursuing a Ph.D. degree in Civil Engineering at the University of Illinois at Urbana-Champaign.

Since 2013, Osman has been a research assistant with Illinois Center for Transportation, the USA under the supervision of Prof. Imad Al-Qadi. His research interest includes the evaluation of pavement surface using computer vision techniques, numerical modeling of pavement materials and development of data-driven models to quantify the effects of environmental and traffic loading on Transportation infrastructures. He has contributed to several projects in his time at ICT, including "Validation and Revision of Fees Charged for Oversize/Overweight Vehicle Permits," sponsored by Illinois Department of Transportation (IDOT), "Instrumentation and Analysis of Airfield Pavement Responses," sponsored by the Federal Aviation Administration; "The Impact of Wide-Base Tires on Pavement — A National Study," sponsored by the Federal Highway Administration; and "Testing Protocols to Ensure Performance of High Asphalt Binder Replacement Mixes Using Reclaimed Asphalt Pavement (RAP) and Recycled Asphalt Shingles (RAS)," sponsored by IDOT.

Osman's awards and accomplishments include the European Union Erasmus Scholarship, Sabanci Holding Fellowship, and the best paper of the year by the Turkish Road Association.

During the program year 2016-2017, Osman won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Developing Machine-Learning Models to Predict Airfield Pavement Responses."

Krishna M. Gurumurthy

The University of Texas at Austin

Doctoral Student

Austin, TX

Email: gkmurthy10@utexas.edu

Krishna M. Gurumurthy is a doctoral student in Transportation Engineering at The University of Texas at Austin, pursuing his research under Dr Kara Kockelman. He received his Master's in Civil Engineering from UT Austin in December 2017, and a Bachelor's from the National Institute of Technology Karnataka, India, in May 2016. He is expected to graduate with a Ph.D. in summer 2020, along with a Master's in Statistics.

His research focuses on travel demand modeling & forecasting, especially through the utilization of largescale agent-based simulation tools. He is particularly interested in capturing the impacts of shared and automated vehicles (S/AVs) on travel patterns and congestion and measuring the resulting effects of various policies.

Murthy, as he's often called, is an Eno Fellow from the 2019 class, actively participates in events organized by transportation organizations like ITE, ITS and WTS, and has previously served in leadership roles in their respective student chapters at UT. In addition to several scholarships, he is also the recipient of the 'Outstanding Student' award by Texas ITE.

He is a peer reviewer for many TRB committees & an expert on shared AVs. In his free time, he enjoys playing basketball and racquetball, and is interested in photography.

During the program year 2018-2019, Krishna won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Impacts of Shared Automated Vehicles on Airport Access & Operations, with Opportunities for Revenue Recovery: Case Study of Austin, Texas."

Alex Hainen, Ph.D.

University of Alabama

Assistant Professor

Tuscaloosa, AL

Email: ahainen@ua.edu

Alex Hainen is an Assistant Professor at the University of Alabama. He received his Ph.D. from Purdue University in Civil Engineering focusing on Transportation Engineering. He was funded by a fellowship from the United States Department of Transportation under the Dwight David Eisenhower Transportation Fellowship.

Alex completed his B.S. in Civil Engineering at Michigan Technological University in 2009 and his M.S. in Civil Engineering at Purdue University in 2011. His research interests include traffic operations, traffic signals, roundabouts, travel time, and airport operations.

During the program year 2011-2012, Alex won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Leveraging Probe Data to Assess Security Checkpoint Wait Times."

Jaime Hernandez

Marquette University

Assistant Professor
Milwaukee, WI
Email: jaime.hernandez@marquette.edu

Jaime Hernandez received his Ph.D. from the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign in December 2015. He holds a Bachelor's degree in Civil Engineering from the National University of Colombia at Medellin and a Master's degree from Ohio University. His research interests include modeling of flexible pavement structures, tire-pavement interaction, and pavement instrumentation. As a graduate student at the University of Illinois, he assisted with several projects including the study of the effect of wide-base tires on pavements, characterization of tire-pavement contact stresses using finite element modeling and experimental measurements, and the effect of various tire parameters on pavement damage.

In his postdoctoral work, Dr. Hernandez served as a co-principal investigator on two projects. The first one aims to determine the effect of wide-base tires on the roads of New Brunswick, Canada. The second project identified material parameters in the laboratory for an idealized AC mixture that provides exceptional performance regarding rutting and cracking. Furthermore, he developed a microMechanical model of AC and studied curling in airfield rigid pavements.

Jaime has received various awards including the General Scholarship from the Society of Hispanic Professional Engineers, First Place Winner in the Younger Member Paper Contest from the ASCE Transportation and Development Institute – 2013 Airfield and Highway Pavement Conference, and Young Researcher from COLCIENCIAS (Colombian equivalent to National Science Foundation). Currently, Dr. Hernandez is an Assistant Professor at Marquette University.

During the program year 2013-2014, Jaime won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Airfield Pavement Response Due to Heavy Aircraft Takeoff: Advanced Modeling for Wheel Interaction Consideration."

Susan Hotle

Virginia Polytechnic Institute and State University

Assistant Professor

Blacksburg, VA

Email: shotle3@vt.edu

Susan Hotle is an Assistant Professor in the Department of Civil and Environmental Engineering at Virginia Tech and is a researcher in the FAA's NEXTOR II consortium with projects, analyzing surface performance and operational metrics. She received her Ph.D. in Civil Engineering from the Georgia Institute of Technology in 2015, working under the advisement of Dr. Laurie Garrow. Susan's doctoral research focused on examining and modeling airline customer search and purchase behavior. Her B.S. (2010) and M.S. (2011) degrees are also in Civil Engineering from the Georgia Institute of Technology.

Prior to joining Virginia Tech's faculty in 2016, Susan worked as an Operations Research Analyst for GRA, Incorporated, supporting the Federal Aviation Administrations' Office of Performance Analysis. During her time in Washington D.C., Susan analyzed taxi-out delay as well as collaborated with Eurocontrol and the Civil Aviation Authority of Singapore to benchmark U.S. operational metrics internationally.

While a graduate student at Georgia Tech, Susan won an award as part of the ACRP Graduate Research Award Program for the program year 2012-2013, preparing research on "The Role of Competitor Pricing on Multi-Airport Search."

Evan D. Humphries

Texas State University

Research Associate

San Marcos, TX

Email: ec1149@txstate.edu

Evan Humphries is a Research Associate in the Ingram School of Engineering at Texas State University, where she assists with developing and submitting proposals for funding, networks multidisciplinary teams for major research projects, establish relationships with industry partners, and manages student workers on research projects. She also teaches Industrial Safety (TECH 4380) at Texas State University. She graduated with her M.S. in Technology – Industrial Technology, in the Department of Engineering Technology at Texas State University in May 2015. Evan worked in the industry for a global airfield pavement services contractor for two and a half years as the International Coordinator, where she established a technical understanding of multiple pavement maintenance activities. During her time there, she was involved in work on 15 airports in 8 countries. Evan's work included evaluation of pavement surface characteristics, and she developed an interest in long-term pavement maintenance planning for budgetary optimization, especially at international and General Aviation airports.

Evan began working at Texas State University on Transportation research in 2012. Since then, she has written proposals for and been awarded grants to perform pavement research from the Federal Aviation Administration, and the Texas Department of Transportation. Her TRB research is published in the *Transportation Research Record* No. 2471. She is also published in the International Journal of Pavement Research and Technology (Vol. 7, No. 3, May 2014). Recently, she co-authored a book chapter in "Smart Cities: Applications, Technologies, Standards, and Driving Factors" (Springer, 2017), and has been working on innovative new materials research.

Evan is currently assisting with the development of a proposed new program in Civil Engineering at Texas State University. The academic program is being developed around the concept of technology-enhanced infrastructure design and management, with complementary research activities in a number of Civil fields.

During the program year 2013-2014, Evan won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "An Evaluation of Pavement Preservation and Maintenance Activities at General Aviation Airports in Texas: Current Practices, Perceived Effectiveness, Costs, and Planning."

Peter Hylton

High Street Consulting
Senior Consultant
Columbia, SC
Email: hylton@highstreetconsulting.com

Peter Hylton works as a senior consultant for High Street Consulting. He received his Ph.D. from Georgia Tech's School of City and Regional Planning, where he researched freight and airport planning. Peter's dissertation examined electronic fulfillment's impact on airports and airport regions. His work has also examined logistics cluster competitiveness and near-airport distribution centers. Peter graduated with a B.S. degree from Georgia Tech's Sam Nunn School of International Affairs and also holds a Master's degree from Georgia Tech's School of City and Regional Planning. Before beginning graduate school, he worked as a logistician for the U.S. Army.

During the program year 2016-2017, Peter won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Air Cargo Forecasting in an Age of Electronic Retail."

Alexandre Jacquillat

Carnegie Mellon University, Heinz College

Assistant Professor of Operations Research and Public Policy
Pittsburgh, PA
Email: alexjacq@mit.edu

Alexandre Jacquillat is an Assistant Professor of Operations Research and Public Policy at Carnegie Mellon University's Heinz College, with cross-appointments in the Department of Civil and Environmental Engineering and at the Tepper School of Business. His research develops and applies stochastic models and optimization methodologies to promote more efficient, reliable, and sustainable infrastructure systems. His primary focus is on air traffic management systems, with the goal of developing data-driven decision-making approaches to enhance airport operations, flight scheduling and capacity planning at busy airports. He is also interested in the emerging field of ride-sharing systems, and their implications for urban mobility, technology deployment, congestion mitigation, and emissions reductions.

Alexandre is the recipient of several research and leadership awards, including the George B. Dantzig Dissertation Award and the Transportation Science and Logistics Dissertation Prize from INFORMS, the Milton Pikarsky Memorial Award for Best Ph.D. Dissertation in Transportation science and technology from the Council of University Transportation Centers (CUTC), the Dissertation Award competition from the Industry Studies Association (ISA), the Anna Valicek Award from AGIFORS, and the L.E. Rivot Medal from the French Academy of Science. During the program year 2012-2013, Alexandre won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Congestion Mitigation at JFK: The Potential of Schedule Coordination."

Luisa Janer

University of Arkansas

M.S. in Industrial Engineering Candidate
Fayetteville, AR
Email: mjanerru@uark.edu

Luisa Janer is a graduate student at the University of Arkansas, pursuing an M.S. in Industrial Engineering. She earned a B.S. in Industrial Engineering from the University of Arkansas, as well. Luisa works as a teaching assistant for Simulation for the Industrial Engineering department.

Luisa started her research career as an undergraduate honors student. She has worked under the guidance of simulation expert Dr. Manuel Rossetti, on evaluating through discrete simulation modeling possible alternatives to ease the continuous passenger flow at security checkpoints. She has also worked on simulation modeling of inventory systems.

Luisa assisted in the development of a spreadsheet simulation model to evaluate the effectiveness of a vehicle routing tool designed to transform the routing and inventory methods at Helmerich and Payne. Luisa's research interests include simulation modeling, network optimization on Transportation logistics, and development of material handling equipment for the aviation industry. She is hopeful to find a position in an industry where she can pursue a career in any of these areas.

During the program year 2016-2017, Luisa won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Simulation Modeling of a Prototype Designed to Address the Congestion of Passengers and Items at the Composure Area of Security Checkpoints."

Angeli Jayme

The University of Illinois at Urbana-Champaign

Ph.D. Candidate
Champaign, IL
Email: agamez2@illinois.edu

Angeli Gamez is a doctoral candidate in Civil Engineering at the University of Illinois at Urbana-Champaign (UIUC) under the advisement of Professor Imad L. Al-Qadi. Her thesis is focused on quantifying the thermo-Mechanical interaction at the tire-pavement interface and its impact on critical pavement responses. She holds a Master's degree in Civil Engineering from UIUC and a Bachelor's degree in Civil Engineering from the University of Nevada, Reno.

Angeli's research interests include tire-pavement interaction, asphalt material modeling, damage evaluation, and pavement rehabilitation and preservation. She enjoys involvement in student organizations and was one of the founding members of the ASCE Transportation & Development Institute graduate student chapter at Illinois. Also, she has been a part of the Graduate Society of Women Engineers (GradSWE) at Illinois and served as a past director of the Women Empowered in STEM (weSTEM) Conference.

During the program year 2017-2018, Angeli won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Turning Maneuver Effect on Near-Surface Airfield Pavement Responses."

Hernando Jimenez
Georgia Institute of Technology
Research Faculty
Atlanta, GA

Dr. Hernando Jimenez passed away on Sunday, October 23, 2016, at the age of 36. Hernando was born on February 10th, 1980, in Bogota, Colombia. Even as a young child, he had dreams of flight. He harnessed that fascination when he came to the USA in 2001 to complete his studies in Aerospace Engineering at the Georgia Institute of Technology, receiving his Bachelor of Science (2003), Master of Science (2006), and Doctorate of Philosophy (2009). After earning the terminal degree for his field of study, he was appointed to be a member of the research faculty at the Aerospace Systems Design Laboratory (ASDL).

As a graduate student and member of the research faculty at the Georgia Institute of Technology, Dr. Jimenez participated in numerous research efforts sponsored by the National Aeronautics and Space Administration and the Federal Aviation Administration in areas of aircraft design and analysis, aircraft technology modeling and selection, air Transportation measures for environmental impact mitigation, and integration of unmanned aircraft systems into the national airspace. He was a graduate fellow of the 2007-2008 Sam Nunn Security Fellowship Program where he conducted research on critical infrastructure protection and airport security risk mitigation. He served as a member of the TRB Aviation Systems Planning Committee, vice-chair/chair-elect of the AIAA Aircraft Design Technical Committee, and co-chair of the AIAA Aerospace Systems Integration Working Group.

Dr. Jimenez was a recipient of a 2008-2009 Airport Cooperative Research Program Graduate Award, sponsored by the FAA and administered by the Transportation Research Board of the National Academies, for which he conducted research on the characterization of the operational and environmental performance of airports and terminal areas including NASA advanced vehicle concepts.

He is survived by his wife, Stephanie Dietrich and two children, Victoria Sophia and Daniel Ivan. He will be remembered for his passion, his love for family and friends, his stupendous eloquence, and his inimitable sense of humor. In addition to his wife and two children, Hernando is survived by his parents, Humberto Jimenez and Anna Susanna "Ansi" van Wageningen; his siblings, Daniel, Humberto Jr, Juan Manuel, and Sandra.

Information updated from
http://www.asturner.com/obituary/Hernando-Jimenez/Decatur-GA/1664804.

James Jones
University of Maryland
Ph.D. Student
Silver Spring, MD
Email: jonesjc1@gmail.com

James Jones is a doctoral student in the Civil Engineering Department at the University of Maryland. He holds a B.S. in Engineering from Swarthmore College, an M.S. in Electrical Engineering from the University of Maryland and an M.S. in Systems Engineering from The George Washington University. Prior to pursuing his Ph.D., James held positions at Northrop Grumman and the RAND Corporation. His duties there included performing trade studies, developing system designs, analyzing inventory turnover and developing analytical models of radar and electronic warfare sensor systems for the defense and intelligence communities. His research is focused on applying operations research techniques to solve problems of air traffic management. More broadly his current research interests include air Transportation, Systems Engineering, and Transportation Policy.

During the program year 2012-2013, James won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Methods for Curbing the Exemption Bias in Ground Delay Programs Through Speed Control."

Minkyung Kang

Aquicore

Data Scientist
Washington, DC
Email: minkyung.kang32@gmail.com

Minkyung Kang is a Data Scientist at Aquicore, an asset monitoring company based in Washington D.C. She works to enhance sustainability in the real estate industry by collecting and analyzing real-time energy data in buildings and finding ways to optimize energy management and building operation. With her effort to advance the real estate industry with new technologies, she won the Unsung Hero Award from Women In PropTech and was selected as a Power Women in Data from DCFemTech in 2019.

Minkyung received her Master's degree in Advanced Infrastructure Systems at Carnegie Mellon University in 2016. As a research assistant, she focused on data science and machine learning applications in infrastructure systems and published papers on data-driven building energy prediction models and building energy benchmarking systems. Before then, she studied construction automation systems in her Master's program at Yonsei University, where she developed sensors for construction robots and published papers on novel ways to optimizing the sensor structure.

During the program year 2015-2016, Minkyung won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, conducting research on "Forecasting Airport Building Electricity Demand on the Basis of Flight Schedule Information for Demand Response Applications."

Ilker Karaca

Iowa State University

Lecturer

Ames, IA

Email: ikaraca@iastate.edu

Ilker Karaca is a Lecturer in Finance at Iowa State University Debbie and Jerry Ivy College of Business in Ames, IA. He teaches courses on a range of topics in finance and construction Engineering, including advanced corporate finance, international finance, construction accounting, and financial management, and project engineering and management. His research focuses on risk-based financial management, project financing, and resource level optimization for complex Engineering projects. Ilker's research interests in aviation center on the quantification of airport business risks and on modeling capacity utilization and operating leverage trade-offs in airport investment decisions. He received his Ph.D. from Iowa State University in 2017. Ilker holds an MBA degree from Texas Tech University, a B.S. in Civil Engineering from Bogazici University, Turkey.

During the program year 2016-2017, Ilker won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Modeling Airport Business Risks, Enplanement Volatility, and Valuation of Flexibility Options in Airport Expansion Projects."

Donald Katz

Delta Air Lines

Manager, Entity Planning and Analysis

Atlanta, GA

Email: donald.katz@gmail.com

Donald Katz is currently working as a Manager in the Entity Planning and Analysis team within Flight Profitability at Delta Air Lines in Atlanta, Georgia. Previously he worked for Long-term Planning and Competitive Analysis in Network Planning. He graduated with a Ph.D. in Civil Engineering from Georgia Tech in December 2012. He earned his Master's degree in Civil Engineering from Georgia Tech in 2010 and his Bachelor's degree in Civil Engineering from N.C. State in 2007. For his doctoral work, he explored the revenue impacts associated with speaking hub airline schedules. Prior to attending Georgia Tech, Donald won a Fulbright to study bus crowding in Dhaka, Bangladesh and collected and analyzed data to understand how bus design characteristics, stop locations and crowding at doors influence safety and operational performance measures.

In 2010, Donald won a National Science Foundation Graduate Research Fellowship. In 2011, he attended the Eno Leadership Development Conference. Donald served as President of the Georgia Tech chapter of the Institute of Transportation Engineers and led the chapter to win the Student Chapter of the Year Award for the Southern District of ITE. During the program year 2011-2012, Donald won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Depeaking Schedules: Beneficial for Airports and Airlines?."

Basak Keskin, CAPM

Syracuse University

Ph.D. Student

Syracuse, NY

Email: bkeskin@syr.edu

Basak Keskin is a Ph.D. student at Syracuse University Civil & Environmental Engineering Program with a concentration in infrastructure asset management. She completed her M.S. degree in Civil Engineering with a focus on construction engineering and management at Bogazici University in Istanbul. She received her B.S. degree with honors from the Civil Engineering Department at Middle East Technical University (METU) in Ankara, Turkey.

Basak's academic and professional interests are mainly centered on the orchestration of digital ecosystems for high-quality asset life cycle management; project management; and integrated project delivery. She worked as a Building Information Modeling (BIM) Engineer in one of the world's largest aviation projects, Istanbul New Airport Project, while completing her Master's degree. She also worked for Massachusetts Port Authority Capital Programs to assist in their BIM processes towards the creation of digital twin and virtual campus for Boston Logan Airport. As a Forge Research Program grant recipient, Basak has also been working with Autodesk Forge Team for technology development.

Basak has various publications on Airport BIM (ABIM). She has had a couple of professional appearances as a speaker at Oracle Construction and Engineering Aviation Roundtable at Tampa International Airport and ACC BIM 201 for Airports: The BIM and Asset Management Relationship. Basak is a member of the Istanbul Arbitration Center and CESAMES Community. She received her title of Certified Associate in Project Management (CAPM) in 2018.

During the program year 2018-2019, Basak won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Airport Building Information Modeling Implementation for Smart Airport Life Cycle Management".

Josephine Kressner, Ph.D.

Transport Foundry

President

Atlanta, GA

Email: josie@transportfoundry.com

Josephine Kressner is President and Founder of Transport Foundry, a company at the intersection of Transportation planning and data analytics. She has an interest in solving critical pain points in urban planning through innovation, open data, and informed decision-making. With a National Science Foundation, Small Business Innovative Research grant and a Transportation Research Board Innovations Deserving Exploratory Analysis contract, Transport Foundry develops methods to use marketing and mobile phone data from multiple sources to support the Transportation planning process. Dr. Kressner graduated with a Ph.D. in Civil Engineering from Georgia Tech in 2014.

During the program year 2010-2011, Josephine won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Using Lifestyle Segmentation Variables to Predict Home-Based Trips for Hartsfield-Jackson Atlanta International Airport."

Drake Krohn

Jacobs Engineering

Project Engineer

Chicago, IL

Email: drake.krohn@jacobs.com

Drake Krohn is a Project Engineer for Jacobs Engineering. He is currently working at O'Hare International Airport in Chicago, Illinois, where he has assisted in airfield projects for the O'Hare Modernization Program and O'Hare 21 Program. Drake graduated with his Bachelor's and Master's degrees in Civil Engineering from Purdue University in 2015 and 2017. He also earned his private pilot's license while studying at Purdue.

Drake participated in the ACRP Graduate Research Award Program for the program year 2015-2016. His research focused on construction phasing and safety at general aviation airports.

Sameer Kulkarni
Continental Automotive Group
Project Manager
Karnataka, India
Email: skulkar2@masonlive.gmu.edu

Sameer Kulkarni graduated with a Master's degree in Operations Research from George Mason University in the summer of 2011. He specialized in stochastic models. As a researcher, he worked as a graduate research assistant at the Center for Air Transportation Systems Research at George Mason University on an approximate dynamic programming approach to dynamic airspace configuration.

Sameer is currently working as a project manager with the Continental Automotive Group in India in the Chassis and Safety Division. Continental Automotive Group is a leading auto component manufacturer with a global presence. His area of focus is mainly manufacturing process optimization, manufacturing cost optimization, lean manufacturing, and project management.

During the program year 2010-2011, Sameer won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Dynamic Airspace Configuration Using Approximate Dynamic Programming - An Intelligence-Based Paradigm."

Fabrice Kunzi, Ph.D.

General Atomics Aeronautical Systems

Project Engineer

San Diego, CA

Email: kunzi@mit.edu

Born and raised in Switzerland, Fabrice Kunzi was first exposed to the study of physics and applied Mathematics when he enrolled at the University of North Dakota where he also obtained a commercial pilot license with an instrument flight and multi-engine rating. He graduated *summa cum laude* with a B.S. degree in Mechanical Engineering with minors in Mathematics and professional flight. During the last two years of undergraduate study, Fabrice joined a team developing the International Space Station Agricultural Camera—a NASA sponsored project that designed a multi-spectral camera, which is currently operating onboard the ISS.

As a graduate student at Massachusetts Institute of Technology, Fabrice focused on the technical implementation of ADS-B in the National Airspace System and how the various stakeholders will benefit from its introduction. The title of his Master's thesis is "ADS-B Benefits to General Aviation and Barriers to Implementation." For his Ph.D. thesis, Fabrice was part of the team that is developed the "Traffic Situation Awareness with Alerting" Automatic Dependent Surveillance-Broadcast Application (ADS-B) for the FAA. TSAA is the first conflict alerting application that allows for reliable alerting in the airport environment without unacceptably high rates of nuisance alerts. The algorithms developed for TSAA currently serve as the basis and a means of compliance with the international certification standard for TSAA published by standards-setting bodies RTCA and EUROCAE. Fabrice received his doctorate in 2013 and now works at Aurora Flight Sciences as the airspace integration and operations research lead.

During the program year 2011-2012, Fabrice won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Reduction of Collisions Between Aircraft and Surface Vehicles Through ADS-B Enabled Conflict Alerting on the Airport Surface."

Paulos A. Lakew

Unison Consulting, Inc.
Director
Mission Viejo, CA
Email: pauloslakew@gmail.com

Paulos Lakew completed his Ph.D. in Transportation Science at UC Irvine's Institute of Transportation Studies. He wrote his dissertation on the determinants of airport traffic and on the cost structures of major freight integrators (FedEx Express and UPS Airlines). Paulos's research work also dealt with airline delays and competition at U.S. airports. Paulos earned his Bachelor's degree in physics from Bard College.

Paulos joined Unison's airport economics and finance practice in 2016. He specializes in developing forecasts of air traffic activity, rental car demand, parking demand, and ground access mode choice. The forecasts he develops are key inputs to airport master plans and financial feasibility studies supporting the issuance of bonds to finance airport capital projects. Prior to Unison, Paulos was a researcher and economist at the California Air Resources Board. He worked under the Board's Chief Economist to provide economic analysis on a wide range of air quality and climate regulations.

During the program year 2013-2014, Paulos won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Airport Traffic and Metropolitan Economies: Determinants of Passenger and Cargo Traffic."

Ben Lee

University of Washington

Postdoctoral Fellow
Seattle, WA
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Ben Lee is currently an NOAA Climate and Global Change Postdoctoral Fellow working with Professor Joel Thornton at the University of Washington. His research goal is to improve our understanding of the role that atmospheric volatile organic compounds play in affecting air quality and climate. Specifically, his project with the Thornton group aims to quantify the contribution that these VOCs have on the formation of secondary organic aerosols which are potentially significant climate-altering species. The tool that he will employ is called the chemical ionization high-resolution time-of-flight mass spectrometer, which is well suited to accurately identify and quantify a whole suite of inorganic and organic acid species in both the gas and particle phases.

Ben's approach is two-fold. First, he plans to probe the cascade of chemical oxidation byproducts of alpha-pinene and isoprene, the two dominant biogenically emitted species, in a controlled laboratory chamber. Though such experiments studying their chemistry have been performed in the past, the pathways, the range of products, and the relative abundances of these aerosol precursors are still ill-defined. Second, he will deploy this instrument on an aircraft platform over the southeast region of the U.S. which is influenced by high levels of both biogenic and anthropogenic VOC emissions. From this campaign, he will gain insight into the distribution of the many VOC byproducts in the open atmosphere that will help to reconcile the measurements of secondary organic aerosol and their gaseous precursors.

During the program year 2009-2010, Ben won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Reactive chemistry in aircraft exhaust: implications on air quality."

Christopher Lee

University of Maryland

M.S.

College Park, MD

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Christopher Lee received an M.S. at the University of Maryland studying Fire Protection Engineering in 2018. He also studied Fire Protection Engineering at the University of Maryland for his undergraduate degree, receiving a B.S. in May 2017. As a Master's student, Chris has been conducting research on hazards associated with cascading failure in lithium-ion battery packs, under the guidance of Dr. Stanislav Stoliarov. Numerous hazards, including failure propagation speed, energy production, and hazardous gas production, have all been quantified experimentally. Chris also tested different battery pack failure mitigation strategies to investigate their impact.

As a member of the 2017-2018 ACRP Graduate Award Program, Chris hopes the results of his work are used to promote safer battery pack design and Transportation practices.

Yi-Hsin Lin

Kyruus, Inc.
Software Engineer
Boston, MA
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Yi-Hsin Lin completed the M.S. in Transportation degree at the Massachusetts Institute of Technology (MIT) in June 2013. She also received B.S. degrees from MIT in Mathematics and music. She first became interested in aviation while working at Lincoln Laboratory where she worked on short-term weather forecasting for aviation. Continuing in that vein, Yi-Hsin's graduate research focused on weather impacts on aviation, particularly for terminal-area arrivals.

Yi-Hsin is currently working as a software engineer at Kyruus, Inc, a Boston-based healthcare IT company. In her free time, she enjoys travel, classical music, swimming, scuba diving, and reading.

During the program year 2012-2013, Yi-Hsin won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Prediction of Terminal-area Weather Penetration based on Operational Factors."

Yi Liu

Amazon

Senior Applied Scientist

Berkeley, CA

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Google Scholar:
https://scholar.google.com/citations?user=1AMfX5QAAAAJ&hl=en

Dr. Yi Liu is currently a Senior Machine Learning Scientist at Amazon focusing on customers' delivery experience. Before that, she worked as a Post-Doctoral Fellow at UC Berkeley. She received her Ph.D. in Transportation Engineering from Berkeley in summer 2015, MPhil degree in Geotechnical Engineering from HKUST in 2009, and a Bachelor's degree in Hydraulic Engineering from Tsinghua in 2007. Dr. Liu's research interests include the recommendation system, data-driven decision-making, machine learning, and Air Transportation. Liu has over 20 peer-reviewed research papers and serves as a referee for several journals including Transportation science and Transportation research part C.

Liu co-organized the 5th International Conference on Research in Air Transportation in 2012 and served as a session chair at Informs since 2013. Liu received various scholarships and awards, including the WTS Leadership Legacy Scholarship, and Robert Horonjeff Memorial Grant. In 2015, Liu is selected as an attendant of the MIT CEE Rising Stars workshop. In 2017, her paper titled "Modeling Ground Delay Program Incidence Using Convective and Local Weather Information" received the best paper award and ATM seminar.

During the program year 2012-2013, Yi won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Ground Delay Program Performance Evaluation."

Amber Woodburn McNair, Ph.D.

Ohio State University

Assistant Professor
Columbus, OH
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Amber Woodburn McNair is an Assistant Professor in the City and Regional Planning section of the Ohio State University Knowlton School of Architecture and holds a joint appointment with the Center for Aviation Studies. She received her Ph.D. from the University of Pennsylvania, Department of City of Regional Planning ('16) under the guidance of Dr. Megan Ryerson (now UPS Chair of Transportation and Dean for Research for the Stuart Weitzman School of Design at the University of Pennsylvania). Dr. McNair received her M.Sc. ('13) from the University of Tennessee, Knoxville's, Department of Civil Engineering and her B.Sc. ('09) from the University of California, Berkeley, Department of Civil and Environmental Engineering.

As faculty, Dr. McNair's main responsibilities include instructional design, teaching, and research. Her research and teaching topics encompass transportation infrastructure planning, environmental impacts of transportation, and air transportation. Dr. Woodburn McNair's research activity includes transportation behavior surveys, airport land use planning, spatial-statistical analysis of airfreight systems, and qualitative analysis of NEPA planning documents.

Amber worked as an undergraduate research assistant with the NEXTOR group at UC Berkeley specifically under the mentorship of Dr. Mark Hansen and his doctoral student, Megan Ryerson. After receiving her B.S., Amber worked for the Federal Highway Administration (FHWA) for two years. In 2011, Amber decided to pursue graduate-level education with an emphasis on Transportation systems. As a graduate student, she participated in a range of aviation research and sustainable intercity transportation planning research.

During the program year 2012-2013, Amber won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Airport Capacity Enhancement and Flight Predictability."

Jim Morrison

Bombardier Commercial Aircraft

Airline Marketing Manager
Toronto, Ontario, Canada
Email: jmorriso@mit.edu

Jim Morrison is an Airline Marketing Manager dedicated to promoting Bombardier's commercial aircraft lineup, including the Q400 NextGen turboprop, CRJ NextGen family, and the 100% new 100-149 seat CSeries. He holds an M.S. in Technology and Policy from Massachusetts Institute of Technology, a B.S. in Engineering Physics from Queen's University, and is a licensed Professional Engineer in the Province of Ontario. As a research assistant at MIT International Center for Air Transportation (ICAT), Jim investigated the impacts of the fuel cost increase on the U.S. air Transportation system and performed a game theory analysis of the impact of single-aisle competition on fleet emissions. Previously, he worked in the geospatial and remote sensing industry with Applanix Corporation as a Product Support Analyst.

Jim's current interests include Transportation systems, technology innovation, environmental policy, and backcountry skiing.

During the program year 2010-2011, James won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Multi-Airport Choice Models for the New York Metropolitan Area: An Application Based on Ticketing Data."

Stacey Mumbower

University of South Carolina

Clinical Assistant Professor
Columbia, SC
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Dr. Stacey Mumbower is a Clinical Assistant Professor at the University of South Carolina, in the Moore School of Business, and the Managing Director of the Moore School's Center for Applied Business Analytics. She received her Ph.D. in Civil Engineering, with a concentration in Transportation Systems, from Georgia Tech in 2013. She holds an M.S. in Statistics from Georgia Tech's School of Industrial and Systems Engineering and a B.S. in Mathematics from Valdosta State University.

Stacey's research leverages online data to better understand airline pricing and product strategies, and how these strategies impact customers, as well as the industry in general. She compiles datasets that track airfares, seat maps, and products displayed to online customers over the booking horizon. Stacey used these data to explore factors that influence airline customers' decisions to purchase premium coach seats and to estimate the revenue impacts of different seat pricing strategies. She has also used online data to estimate price elasticities of flight-level demand using instrumental variable methods. Stacey research has been published in *Manufacturing & Service Operations Management*, *Transportation Research Part A: Policy and Practice*, and *Transportation Research Record*. To address the lack of disaggregate airline data available to researchers, her airline pricing datasets were recently made publically available in *Manufacturing & Service Operations Management* as downloadable datasets with open-access. She uses these pricing datasets to develop hands-on activities that teach students how to use data analytics software, providing them with practical experience with analytics.

Prior to joining the Moore School, Stacey was a Post-Doctoral Prevention Effectiveness Fellow at the Centers for Disease Control and Prevention, where she worked on resource allocation models for HIV prevention funding. She also spent two years as a statistical analyst in the Georgia Department of Transportation's Office of Transportation Data.

During the program year 2008-2009, Stacey won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Using On-Line Data to Explore Competitive Airline Pricing Policies: A Case Study Approach."

Carey A. Nadeau

Open Data Nation
Founder
Washington, DC
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Carey A. Nadeau is the Founder and CEO of Open Data Nation, a performance management consulting company that transforms open, public data into reliable predictions that mitigate risks to public health and safety. The FIVAR product, which predicts when a restaurant is likely to fail and inspection, has been featured in the Atlantic and GovTech Magazine in 2016. Learn more at opendatanation.com. She holds a Master's in City Planning from Massachusetts Institute of Technology and a B.A. in Political Science and Public Policy from George Washington University.

Before founding Open Data Nation, Carey worked for the past decade doing quantitative research and analysis using open data at the Brookings Institution and Urban Institute. Nadeau's work has received multiple awards, including the O. Robert Simha prize for most outstanding contribution to planning by a School of Architecture and Planning student while at Massachusetts Institute of Technology.

During the program year 2014-2015, Carey won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Unaffordable Fare: The Cost of Public Transportation for Low-Income Commuters Working at Three Airports."
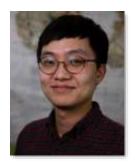
Boohyun Nam

University of Central Florida

Assistant Professor

Orlando, FL

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Dr. Boohyun Nam is an assistant professor (2011 to present) of Civil Engineering at UCF. He received his Ph.D. in Civil Engineering at the University of Texas at Austin in 2010 and worked at the Center for Transportation Research as a Postdoctoral Researcher. Dr. Nam has been working in the areas of 1) the use of recycled materials in road construction, 2) nondestructive evaluation of pavement systems, and 3) materials microstructure characterization (pavement and geotechnical materials). He is currently a member of (young committee) of TRB AFD80 and AFH30.

During the program year 2009-2010, Dr. Nam won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Transition of the Rolling Dynamic Deflectometer Device from a Screening Tool to an Evaluation Tool for Rigid Airfield Pavement Projects."

Yongjoon Park

University of Maryland

Ph.D. Candidate
College Park, MD
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Yongjoon Park is a doctoral candidate at the University of Maryland whose research focuses on antitrust implications of mergers in the U.S. airline industry. He received the 2018 Robert F. Lanzillotti Prize for best paper in antitrust economics for his work on how to quantify the constraints that potential entry and product repositioning will place on market power after mergers. Yongjoon received his B.S. degree with a dual major in Mathematics and Electronics and Electrical Engineering from Pohang University of Science and Technology, and his M.S. in Economics from Seoul National University.

During the program year 2017-2018, Yongjoon won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "The Impact of Airline Mergers on Environmental Externalities."

Richard Penn

American Airlines

Manager – Data Strategy and Decision Support
Dallas, TX
Email: Richard.B.Penn@aa.com

Richard Penn is currently working as the Manager of Data Strategy and Decision Support for American Airlines within the Revenue Management department. His team is responsible for empowering decision making and innovation within the commercial organization through the use of data, reporting, and business intelligence tools.

Richard received his B.E. in Industrial Engineering from the University of Arkansas in 2007 and began pursuing his MBA in 2012 at the Georgia Institute of Technology. Prior to enrolling at Georgia Tech, he spent five years working in operations strategy for Wal-Mart Stores, Inc. at their corporate headquarters. A summer internship with American Airlines in 2013 opened Richard's eyes to the excitement of commercial aviation which led him to take a full-time position with American Airlines upon graduating.

During the program year 2013-2014, Richard won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Is Your Flight Really On-Time?: An Analysis of When U.S. Airlines Announce Flight Delays."

Dominique Pittenger

University of Oklahoma

Research Assistant Professor

Norman, Oklahoma

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Dominique Pittenger received her Ph.D. in General Engineering at the University of Oklahoma where she had previously received her B.S. in Construction Science and M.S. in Construction Administration. Her specific expertise is in the life-cycle cost analysis of infrastructure assets such as highway and airport pavements.

Dominique is currently serving on the National Research Council's Transportation Research Board Committee on Pavement Preservation (AHD18). She also served on the National Science Foundation Panel for the Sciences behind Sustainability Quantification for Building and Infrastructure Design, Engineering, and Construction.

Dominique serves as a Research Assistant Professor in the Gallogly College of Engineering at theUniversity of Oklahoma (OU) and is currently serving on the National Research Council's Transportation Research Board Committee on Pavement Preservation (AHD18). She is engaged in research on various topics for state highway agencies, the National Cooperative Highway Research Program, the Airport Cooperative Research Program, and the industry. She is the technical director of the Southern Plains Transportation Center, a regional UTC and director of the Women in Engineering Program at OU. Dominique's hometown is Norman, Oklahoma. She is married and the mother of three children.

During the program year 2009-2010, Dominique won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Evaluating Selected Airport Pavement Treatments' Sustainability Using Life-Cycle Cost, Raw Material Consumption and Greenroads Standards."

Zhu Qing

Georgia Institute of Technology

Postdoctoral Fellow

Atlanta, GA

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Zhu Qing is a Postdoctoral Fellow at Georgia Institute of Technology, where his research focuses on connected/autonomous vehicles, human factors, and applications of virtual/augmented/mixed reality technologies in transportation. He received his Master's and a Ph.D. degree in Civil Engineering from the University of Missouri in 2016 and 2019 respectively. He developed a networked multi-modal transportation simulator system (auto, truck, bicycle, wheelchair, and pedestrian) from scratch without the use of any proprietary hardware or software to study a host of transportation behaviors, communications, and performance issues. The simulator system was used in a variety of research projects funded by USDOT, FHWA, the Smart Work Zone Deployment Initiative Pooled Fund, and other external funding resources.

During the program year 2018-2019, Zhu won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Evaluation of Airport Wayfinding Accessibility With the Use of a Wheelchair Simulator."

Lauren Reddy

S&K Technologies

Payload Interface Requirements Engineer
Houston, TX
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Lauren Reddy participated in a variety of research projects related to air transportation while attending graduate school at Purdue University, including a NASA-funded project focused on reducing emissions in the commercial airline fleet and an FAA-funded project on developing an Air Connectivity Index.

Lauren currently works at S&K Technologies, a subcontractor of Boeing, writing requirements for payloads going to the International Space Station. Previously she worked at Raytheon in Woburn, Massachusetts as a systems engineer on the Upgraded Early Warning Radar and Qatar Early Warning Radar programs. She holds a remote pilot's license and a private pilot's license.

Lauren won an award as part of the ACRP Graduate Research Award Program for the program year 2014-2015, preparing research on, "Opinion Surveys to Reduce Uncertainty in Public and Stakeholder Perception of Unmanned Aircraft." She received her Ph.D. in Aerospace Engineering in 2016.

Stephen Roswurm

The University of Oklahoma

Graduate Research Assistant

Norman, OK

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Stephen Roswurm, M.S., E.I., is a Graduate Research Assistant at the University of Oklahoma, currently in the second year of his Ph.D. program in Civil Engineering. Stephen's research focus is on material properties and structural design of concrete. He completed his B.S. in Civil Engineering at OU in May 2017, and his M.S. in Civil Engineering at OU with a focus on structural design and concrete materials in May 2018. Stephen researched shrinkage-compensating concrete for his Master's thesis and will be focusing on pre-stressed, pre-tensioned concrete for his doctoral dissertation. In addition to these personal research interests, he has assisted on research projects involving rapid-setting concrete, chemically pre-stressed concrete, shear behavior of concrete bridge girders, and ultra-high performance concrete.

Stephen is from central Oklahoma, and in his spare time enjoys spending time with his family and his church, horseback riding, cycling, and playing sports. Stephen is a lifelong OU fan and especially loves watching Oklahoma's football, basketball, and baseball teams play.

During the program year 2017-2018, Stephen won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Developing Large Slab Airport Runways for the Next Century."

S.M. Sajed Sadati

The Iowa State University

Research Assistant

Ames, IA

Email: ssadati@iastate.edu

Sajed Sadati is currently a doctoral candidate in the Department of Civil, Construction and Environmental Engineering at Iowa State University (ISU), specializing in both Intelligent Infrastructure Engineering and Construction Engineering and Management. He earned his BSc and MSc degrees in Aerospace Engineering from Amirkabir University of Technology (AUT), Tehran, Iran, in 2008 and 2011 respectively. He worked on the identification of dynamic parameters of nonlinear structures during his masters at AUT. Because of his interest in studies on sustainable development and renewable energy technologies, he pursued a second Masters in Sustainable Environment and Energy Systems program at Middle East Technical University (METU), Turkey, starting from September 2013. His research at METU included investigation on applications of energy storage systems for deploying higher fractions of renewable energy units in the grid. During his studies on renewable energy technologies, Sajed conducted research on the feasibility of installing renewable energy units based on the available meteorological data for any specific region.

Sajed is working on performance assessment of electrification in transportation infrastructure and electricity-based processes at airports and highways at ISU since August of 2016. His research interests include sustainable constructions, integration of renewable energy technologies in building design, energy storage systems and low carbon technologies. To date, his research has led to more than 17 peer-reviewed journal and conference publications. Sajed has received several awards during his research at ISU including the Graduate Research Initiative Fellowship from ISU and the Partnership to Enhance General Aviation Safety, Accessibility and Sustainability Student of the Year Award.

During the program year 2018-2019, Sajed won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Impact of Utilizing Electric Ground Power Systems on Airport Electricity Demand Profile."

Izak M. Said

University of Illinois at Urbana-Champaign

Ph.D. Student

Champaign, IL

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Izak M. Said is currently a doctoral student at the University of Illinois at Urbana-Champaign under the supervision of Professor Imad L. Al-Qadi. He holds a B.S. degree and M.S. in Civil Engineering (Lebanese American University). His research interests focus on constitutive modeling of damage in flexible pavements, sustainable infrastructure, and numerical analysis. He worked in the team that developed a new tool to predict the impact of Wide-Base Tires on New Brunswick roads.

Izak received the ACRP Graduate Research Award for the program year of 2017-2018. The research proposal that earned him the award focuses on the development of a framework, which allows for a holistic evaluation of airport pavements based on structural and environmental performance. Izak is currently the president and Engineering council representative of the University of Illinois Chapter of the American Society of Civil Engineers (ASCE) Transportation.

Sakib B. Salam

WSP

Associate Consultant
Washington, DC
Email: sakibreed@gmail.com

Sakib B. Salam is a Transportation Economist and Consultant with WSP. He specializes in the analysis of public transportation data, financial analysis, and economic research. Sakib is interested in public policy issues in Transportation- both academic and those affecting stakeholders across the US. Prior to joining his current position, he was a Master's student in Applied Economics at Oregon State University. He had the opportunity to work at the Eno Center for Transportation in Washington, DC where he published an economic study on overcoming the policy obstacles facing the multi-billion dollar federal aviation modernization program called NextGen.

Sakib is originally from Dhaka, Bangladesh. He came to the US in 2005 for higher education and got his B.A in Economics from Reed College in Portland, OR. In his spare time, he enjoys playing guitar, watching movies, and following soccer. His favorite team is Manchester United.

During the program year 2011-2012, Sakib won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Is There Still A Southwest Effect?"

Christian M. Salmon

Western New England University

Assistant Professor
Springfield, MA
Email: salmon@gwmail.gwu.edu

Christian M. Salmon graduated with a Doctorate of Science degree in Engineering Management from The George Washington University in December 2010.

Christian has spent about 1/3 of the past 3 years working with HEAL Africa Hospital in the city of Goma in the eastern region of the Democratic Republic of Congo. There he was assisting local healthcare providers in establishing information management practices commiserate with the needs and capabilities of low resource healthcare settings. This work is ongoing and has now become the focus of his new position as an assistant professor of Industrial Engineering and Engineering Management at Western New England University in Springfield Massachusetts.

During the program year 2008-2009, Christian won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Exposure at the Airport/Community Interface: Quantifying Metrics of Exposure in the Vicinity of Public-Use, Non-Towered Airports."

Priyanka Sarker

The Boeing Company

Airport Engineer

Seal Beach, CA

Email: psarker03@gmail.com

Priyanka Sarker is an Airport Engineer at the Boeing Company. Priyanka recently defended her Ph.D. dissertation entitled "Analyses and Prediction of Granular Layer Rutting Trends in Airport Pavements due to Heavy Aircraft Wheel Loading and Wander Patterns" at the University of Illinois at Urbana-Champaign. At the University of Illinois, Priyanka worked with Prof. Erol Tutumluer on several federal and state government-funded projects to develop data-driven methodologies to predict damage accumulate trends in pavements to design and maintain sustainable highway and airfield infrastructures. Prior to starting her Ph.D., Priyanka obtained her Master's degree from the University of Akron in 2012 and her B.S. degree from Bangladesh University of Engineering and Technology in 2009, both in Civil Engineering. During her MS, Priyanka worked on a feasibility study to assess the performance of various pavement markings under service conditions in Ohio that aimed at improving safety on the Ohio Department of Transportation's (ODOT) highway network.

Priyanka received the ACRP Graduate Research Award in the program year 2016-2017 to investigate airport pavement damage mechanisms under realistic traffic conditions.

Kristin B. Schwarz

National Park Service

Email: biondikm@gmail.com

Kristin Schwarz is originally from Pennsylvania and obtained her B.S. degree in Biology at Susquehanna University. She is currently living in Mississippi and obtained her M.S. degree in Wildlife and Fisheries from Mississippi State University. Her thesis involved analyzing the FAA's National Wildlife Strike Database for mammal incidents with U.S. Civil aircraft and estimating mammal use of two potential airport land-cover types to try to reduce mammal incidents.

Kristin has published several articles under her maiden name, Biondi, but recently married in May 2013. She is currently working for the National Park Service and hopes to continue a career in conservation education so that she may communicate the importance of wildlife and natural resources to the public.

During the program year 2011-2012, Kristin won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Behavioral Traits and Airport Type Affect Mammal Incidents with U.S. Civil Aircraft."

Nereyda Sevilla

George Mason University

Aerospace Physiologist
Alexandria, VA
Email: nereydasevilla@msn.com

Dr. Nereyda Sevilla is the Chief Management Official for the Air Force Clinical Investigations Program. She entered the Air Force in 1997 after attending the United States Air Force Academy. She was selected to enter the Aerospace Physiology career field with an assignment at Holloman Air Force Base conducting centrifuge and altitude chamber training. She moved on to become the Aerospace Physiology Management Fellowship in the Office of the Surgeon General and completed a Master's in Public Health with a concentration in Biostatistics and Epidemiology. The assignment also included reviewing and accepting international Aerospace physiology programs, revisions of Aerospace physiology specific Air Force Instructions, coordination of Human Performance Training Team documentation and implementation. Further assignments included Chief of Human Performance Training Teams at Whiteman AFB, MO; Kunsan AB and Osan AB, South Korea.

As part of Team Aerospace, Nereyda worked closely with Aerospace medicine, life support, wing safety, and other agencies to provide just-in-time human performance training needed to safely and effectively accomplish the missions. She separated from active duty in 2006 but continues her service in the Air Force as a Civilian. Nereyda graduated from George Mason University with a concentration in Biodefense in 2017.

During the program year 2016-2017, Nereyda won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Germs on a Plane: The Transmission and Risks of Airplane-Borne Diseases."

Stephanie Sherman

MITRE[1]

Systems Engineer, Sr.
Bedford, MA
Email: shamblin@vt.edu

Stephanie Sherman is a Multi-Disciplinary Systems Engineer at MITRE. Her current work focuses on both airborne and ground-based sense and avoids for the United States Air Force Unmanned Aircraft Systems (UAS), developing new technologies as well as establishing safety cases for the use of ground-based Air Traffic Control radars to enable UAS integration into the National Airspace System (NAS). She specializes in modeling and simulation analysis. Previous experience includes missile modeling and simulation for the Department of the Navy where she co-authored professional publications on missile evasive weave design and performance analysis. Stephanie received a B.S. and M.S. in Aerospace Engineering from Virginia Tech. As part of her graduate research, she built a model simulating a decentralized NAS in which multiple-aircraft interaction was based on Smoothed Particle Hydrodynamics methodology.

Stephanie's research was funded by the Institute for Critical Technology and Applied Science and awarded a Virginia Space Grant Consortium Graduate Research Fellowship as well as a 2014-2015 ACRP Graduate Research Award preparing research on "Quantifying the Effects of Uncertainty in a Decentralized National Airspace System."

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[1] Approved for Public Release; Distribution Unlimited. Case Number 15-3427. The author's affiliation with The MITRE Corporation is provided for identification purposes only, and is not intended to convey or imply MITRE's concurrence with, or support for, the positions, opinions or viewpoints expressed by the author.

Ioannis Simaiakis

McKinsey & Company

Associate

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Ioannis Simaiakis is a Management Consultant with McKinsey's Operations Practice in Washington, DC. He received his Ph.D. in Aeronautics and Astronautics from the Massachusetts Institute of Technology. His research focused on the development of new estimation techniques, queuing models, and dynamic programming algorithms for predicting taxi-out times in the airport terminal area, and for airport operations planning under uncertainty.

During the program year 2008-2009, Ioannis won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Analysis and Control of Airport Departure Processes to Mitigate Congestion Impacts."

Emerald Simons

Gulfstream Aerospace Corporation

Acoustics and Vibration Engineer
Savannah, GA
Email: emerald.simons@gulfstream.com

Emerald Simons holds a B.S. degree in Mechanical Engineering and an M.S. degree in Applied Engineering with a concentration in Energy Science from Georgia Southern University. She worked towards a career in the aerospace industry prior to starting school, as an Apache attack helicopter specialist in the U.S. Army. Her Master's thesis was on the combustion sound and vibration characteristics of an aero-derivative gas turbine, with a focus on the use of alternative fuels. Emerald is currently an Acoustics Engineer at Gulfstream Aerospace Corporation, and she is the External and Community Noise focal for new aircraft programs. Outside of work, she enjoys spending time with her husband and daughter, cooking, and eating.

During the program year 2015-2016, Emerald won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Aircraft Gas Turbine Noise Reduction Utilizing New Synthetic Fuels and Sound Insulation Materials."

Navaneethan Sivagnanasundaram

Wichita State University

Human Factors Scientist
Wichita, KS
Email: neethansiv@gmail.com

Navaneethan Sivagnanasundaram, M.A., is a graduate student currently enrolled in the Human Factors Psychology Ph.D. program at Wichita State University (WSU) in Wichita Kansas. He is a member of the Laboratory of Applied Visual Attention at WSU and his research focuses on the visualization of information for human-machine interfaces. Navaneethan's research explores how human visual perception and cognitive processes interact with the physical and temporal aspects of interface elements.

Navaneethan's awards include a Postgraduate Scholarship from the National Science & Engineering Research Council (NSERC) of Canada, a Certificate of Excellence from the Canadian Psychological Association and two Undergraduate Research Awards (also awarded by NSERC). He is a student member of the Human Factors and Ergonomics Society and Vision Sciences Society.

Navaneethan is a 2014-2015 ACRP Graduate Research Award recipient, studying the design and efficiency of air traffic symbology in navigation displays. Navaneethan has experience designing and evaluating interfaces for commercial aircraft, unmanned vehicles and a variety of consumer products.

Clayton Stambaugh

Illinois Department of Transportation

Aviation-Ports-Waterways Facilities Specialist, Planning and Programming Springfield, IL

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Twitter: @clay_stambaugh

Clayton Stambaugh serves as an aviation program manager and facilities specialist for the Illinois Department of Transportation (IDOT). Stambaugh currently manages the Illinois Aviation System Plan process and supports the development of annual and multiyear airport improvement programs. Additionally, he helps manage the Illinois Marine Transportation System Initiative for IDOT. He previously served as airport manager at Pekin Municipal Airport and served on the executive committee with the Illinois Public Airports Association. Stambaugh participates in multiple projects and programs with the Airport Cooperative Research Program. In addition, he is the Vice-chair for the Transportation Research Board (TRB) Committee on Intergovernmental Relations in Aviation and a standing member with the committee on Inland Water Transportation. Stambaugh recently led marketing and communication efforts for the TRB 10th National Aviation System Planning Symposium.

Stambaugh is a graduate of Southern Illinois University Carbondale (SIUC), where he obtained a Master of Public Administration degree focusing on aviation administration. He served as a graduate assistant working with various partners through the National Airport Safety Data (5010) Program. His primary research focused on using digital technologies, such as social media, to improve airport communication, public relations, and marketing. Stambaugh also holds a Bachelor of Science degree in Aviation Management and an Associate of Applied Science degree in Aviation Flight from SIU. He holds a Commercial Pilot Certificate for Airplane Single and Multi-Engine Land with an Instrument Airplane rating, as well as a Remote Pilot Certificate. Stambaugh now acts as an Assistant Lecturer for SIUC and teaches Aviation Security Regulations and Management, General Aviation Operations, and Airport Planning.

During the program year 2011-2012, Clayton won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Social Media and Primary Commercial Service Airports."

Jeff Stempihar

Arizona State University

Assistant Research Professor

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Jeff Stempihar is currently an Assistant Research Professor at Arizona State University with a research emphasis on sustainable pavement materials, performance characterization of asphalt concrete, and data collection for Transportation systems research. He is also a professional Civil Engineer and has spent several years working on the design and construction of airfields and airport facilities. In addition, Jeff teaches Civil Engineering courses related to airfield design and pavement materials. He serves on technical committees, is active in mentoring students and involved in his local community. In his spare time, he enjoys spending time outdoors with his family.

During the program year 2010-2011, Jeff won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Use of Fiber Reinforced Asphalt Concrete as a Sustainable Paving Material for Airfields."

Daniel Suh, Ph.D.

Nike

Senior Data Scientist
New York City, NY
Email: dysuh03@gmail.com

Daniel Suh is a Senior Data Scientist at Nike. He works on machine learning and predictive analytics for Nike's consumer behaviors enabling consumer-centric insights on personalization, marketing optimization, and budgeting. Daniel received his doctorate in the Department of City and Regional Planning at the University of Pennsylvania studying under Dr. Megan Ryerson in 2018 with a dual Master's degree in Statistics from Wharton. His dissertation work focuses on a systematic evaluation of aviation demand forecast accuracy and airport expansions. Previous works include modeling of a large neighborhood heuristic for an optimal ad-hoc hubbing strategy in an airport outage and conducting sensitivity analysis for an air and rail diversion model. Daniel received a Master's degree in City and Regional Planning at the University of Pennsylvania while working at AECOM as an Aviation Intern and Delaware Valley Regional Planning Commission (DVRPC) as a Long-Range Planning intern. He holds a Bachelor's degree in Economics from Brandeis University.

During the program year 2015-2016, Daniel won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Adaptive Airport Planning Frameworks and Techniques for a New Era of Planning."

Zhe Sun

Arizona State University

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Zhe Sun is a Ph.D. candidate in the Civil, Environmental and Sustainable Engineering Program at Arizona State University, working under the advisement of Dr. Pingbo Tang. He received an M.S. in Industrial Engineering (2017) and an M.S. in Civil Engineering (2016) from the State University of New York, University at Buffalo, and a B.E. in Civil Engineering (2014) from Beijing University of Civil Engineering and Architecture.

Zhe is a multi-disciplinary researcher in Computer Vision, Bridge Engineering, and Human Factors. His research focuses on imaging (e.g., LiDAR) and information modeling techniques with full consideration of human factors to support data-driven management of civil infrastructure systems (e.g., bridge inspection, nuclear power plant outage control, and air traffic control).

During the program year 2018-2019, Zhe was awarded one of ten awards funded by the Airport Cooperative Research Program (ACRP) for his exploration of new public-sector aviation issues. His one-year project – *Using Automatic Speech Recognition and Linguistic Analysis for Real-Time Communication Error Detection and Proactive Air Traffic Control* – aimed to reduce communication errors between pilots and Air Traffic Controllers and ensure air traffic operation safety.

Yanshuo Sun, Ph.D.

Florida State University

Assistant Professor

Tallahassee, FL

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Yanshuo Sun, Ph.D. is an Assistant Professor of Industrial Engineering at the FAMU-FSU College of Engineering, Florida State University. He received his Ph.D. in Transportation Engineering from the University of Maryland, College Park. Dr. Sun has broad research interests in Transportation optimization problems, especially in public transit, air transportation, ridesharing, and multi-modal freight systems.

As a recipient of a 2015-2016 ACRP Graduate Research Award, Dr. Sun studied how to coordinate the development of various airport components in a dynamic and uncertain environment. His research findings from his dissertation on the same topic have been published in *Transportation Research Record*, *Transportation Research Part B*, and *Journal of Advanced Transportation*. In addition to the graduate research award sponsored by the Federal Aviation Administration (FAA), Dr. Sun also received awards from the Airport Council International-North America (ACI-NA), the American Railway Engineering and Maintenance-of-Way Association (AREMA), and the American Public Transportation Association (APTA).

Prem Swaroop

Dover Corporation

Principal Data Scientist

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Prem Swaroop is a doctoral alumnus of Robert H Smith School of Business and Institute for Systems Research at the University of Maryland, where his adviser was Prof Michael Ball. He is a founding member of Dover's Corporate Digital Organization. He is responsible to envision, develop, accelerate, and deploy data science-based solutions for Dover's Operating Companies and customers, by leveraging large-scale Industrial Internet of Things (IIoT) investments and deep domain expertise.

During the program year 2011-2012, Prem won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "A Consensus-Building Mechanism for Setting Service Expectations in Air Traffic Flow Management."

Maulik Vaishnav

Chicago Transit Authority

Lead Strategist
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Maulik Vaishnav is a Lead Strategist for Revenue & Fare Systems at Chicago Transit Authority (CTA). He manages CTA's fare policy, revenue forecasting, and business development strategy. His current project focuses on developing City of Chicago Mayor's Office transportation strategy and priorities, including implementation of major initiatives such as downtown congestion pricing on ride-hailing trips and increasing sustainable non-auto trips in the city. Prior to his current position, he held analytical roles in Planning and Budget at the transit agency.

Prior to joining CTA in 2012, he was a Transportation Planner for Arup in San Francisco. An urban planner and applied economist by training, he focused on aviation policy in graduate school at the University of Illinois in Urbana-Champaign.

Maulik's ACRP Graduate Research Award research included case studies of five Essential Air Service Program communities in close proximity (one hour drive) to each other or to a major airport to understand the local interest for a federal program supporting declining small community air service in the program year 2009-2010.

Parth Vaishnav, Ph.D.

Carnegie Mellon University
Ph.D.
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Parth Vaishnav received his doctorate at Carnegie Mellon University's Department of Engineering and Public Policy in 2015. His research focused on the economics of reducing greenhouse gas emissions from Civil aviation. Before starting at CMU, he worked for an international oil and gas company in Singapore and The Netherlands. Parth holds a Master's degree in Technology Policy from the University of Cambridge in the UK as well as a Master's degree in Product Development and a Bachelor's degree in Mechanical Engineering from the National University of Singapore.

During the program year 2012-2013, Parth won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Low-Hanging Fruit? The Costs and Benefits of Reducing Fuel Burn and Emissions from Taxiing Aircraft."

Parker D. Vascik

Massachusetts Institute of Technology

Ph.D. Student

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Parker Vascik is a doctoral student in Aerospace Systems Engineering at the Massachusetts Institute of Technology (MIT). He is advised by Dr. John Hansman and his research focuses on systems analysis of urban air mobility and unmanned aircraft networks. Parker received dual Master's degrees in Aerospace Engineering and Technology & Policy from MIT. He earned his Aerospace Engineering Bachelor's degree from Georgia Tech.

Parker's dissertation introduces an airspace assessment tool that supports context-dependent system design for emerging aviation operators and informs a feasible service scale. His research also investigates approaches to significantly expand the number of small aircraft or helicopter operations at commercial airports and investigates the development of small footprint, high throughput heliport infrastructure. His contributions to the research field include fifteen technical papers, over a dozen invited presentations, and support of the Uber white paper on urban air mobility. Parker also worked with NASA's Unmanned Aircraft System Traffic Management (UTM) program, Rolls-Royce North America, and consulted for a variety of startups, aviation firms, and state governments.

Parker was awarded the 2018 Dr. Jing Yen Vertical Flight Foundation Award by the American Helicopter Society. He received the 2016 Brian Mar best student paper award from the International Council on Systems Engineering. Parker was the 2014 MIT Zakhartchenko Fellow, a NASA Aeronautics Scholar from 2012 to 2016, and a Stamps President's Scholar at Georgia Tech.

During the program year 2018-2019, Parker won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Evaluating the Interoperability of Urban Air Mobility Systems and Airports ."

Vikrant Vaze

Dartmouth College

Assistant Professor

Hanover, NH

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Vikrant Vaze is an Assistant Professor of Engineering at Dartmouth College. Before joining the Dartmouth faculty in 2014, he worked in the industry for two years as a member of the research staff at Philips Research. Earlier, he was a post-doctoral research associate at the Massachusetts Institute of Technology (MIT) where he received his Ph.D. in Systems 2011. He also received an MS in Operations Research and another MS in Transportation, both from MIT, and a Bachelor of Technology degree from the Indian Institute of Technology (IIT) in Bombay. Vikrant's research interests include applications of optimization, game theory, mechanism design, statistical modeling, and data mining methods to problems in logistics, Transportation, energy, and healthcare.

While a graduate student at the MIT, he won an award as part of the ACRP Graduate Research Award Program for the program year 2010-2011, preparing research on, "Airline Frequency Competition in Airport Congestion Pricing." He is also the recipient of a number of academic and research honors, including the Faculty Early Career Development Program (CAREER) Award from the National Science Foundation, Pikarsky Award for Outstanding Doctoral Dissertation from the Council of University Transportation Centers, a best paper award from AGIFORS, two best paper awards from FAA/EUROCONTROL, merit-based doctoral student fellowship from UPS, Presidential Fellowship from MIT, and the President of India Gold Medal from IIT Bombay.

Kleoniki Vlachou, Ph.D.

University of Maryland

Senior Research Scientist
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Kleoniki Vlachou received her doctorate at the University of Maryland under the supervision of Professor David Lovell. Her research focused on applications of operations research techniques to problems in air traffic management and more specific to aviation congestion management. She has worked on numerous projects funded by the Federal Aviation Administration and NASA. Kleoniki received a B.S. degree in Civil Engineering from the National Technical University in Athens, Greece, and an M.S. degree in Transportation Engineering from the University of Massachusetts, Amherst.

During the program year 2011-2012, Kleoniki won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Equitable Resource Allocation Mechanisms During Reduced Airspace Capacity."

Thomas Wall

Argonne National Laboratory

Senior Infrastructure & Preparedness Analyst
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Dr. Thomas Wall is an Infrastructure and Preparedness Analyst with the Risk and Infrastructure Science Center at Argonne. He leads Argonne's Climate Impact Data and Risk Analysis effort, which aims to leverage Argonne's deep capabilities in climate science and modeling, advanced computing, infrastructure risk analysis, and decision science to provide actionable climate impact information to the Engineering and planning communities, to industry, and to state and local governments. Tom also has extensive experience in the area of critical infrastructure analysis and protection and has supported infrastructure analysis projects for the U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency, and state and local governments. Notably, he has led efforts in the DHS Regional Resilience Assessment Program, which directly engages with communities and regional stakeholders to identify infrastructure risks and dependencies, and then develop strategies to enhance the resilience of those systems to climate, natural disasters, and other hazards.

Tom earned an Honors B.S. in Civil Engineering at Oregon State University, and an M.S. and Ph.D. in Civil Engineering from the Georgia Institute of Technology, where his research focused on climate resilience, adaptation, and infrastructure management for Transportation systems.

During the program year 2012-2013, Thomas won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Exploring the Use of Egocentric Online Social Network Data to Characterize Individual Air Travel Behavior."

Jinfeng Wang

Gilead Sciences, Inc.
Statistical Programmer
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Jinfeng Wang received her Bachelor's degree at Beijing Forestry University in China, with a major in Forestry. She completed her Master's degree in environmental sciences under Dr. Huaicheng Guo at Beijing University in China, where she attained skills in watershed modeling, spatial analysis, and data management. She studied Environmental Engineering at the University of Illinois at Urbana-Champaign under Dr. Edwin Herricks. During her graduate studies, Jinfeng has gained extensive experience in statistical analysis and programming and performed extensive research requiring statistical analysis of biological and environmental conditions. As a research assistant in Dr. Herrick's research group, she has participated projects focusing on airport wildlife mitigation and performed advanced statistical analysis and modeling studies to develop a risk assessment model of flight hazards near airports. Part of her studies has been utilized in FAA wildlife hazard management. Because of her expertise in Statistics, she became a statistical programmer after graduation.

Jinfeng is now working at Gilead Sciences, Inc. in support of Gilead research efforts related to clinical trials and pharmaceutical studies.

During the program year 2010-2011, Jinfeng won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Bird-aircraft Strike Risk Assessment at Commercial Airports: Sub-Model Development Accounting for Strike Occurrence and Severity at Seattle Tacoma International Airport."

Yuan Wang

University of South Florida

Ph.D. Candidate

Tampa, FL

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Yuan Wang is currently a doctorate candidate advised by Dr. Yu Zhang in the Department of Civil & Environmental Engineering at the University of South Florida (USF). Yuan's research has involved the use of techniques from micro-simulation, econometric modeling, machine learning, and deep learning to help airport planners and air traffic management to make a decision under the environment of next generation of ground Transportation and air traffic management. Her dissertation topic is "Dynamic Prediction of Runway Configuration and Airport Acceptance Rate" using deep learning technics by applying multi-source weather forecast.

Under the ACRP Graduate Research Award Program, Yuan developed a simulation platform to analyze the impacts of the fully automated vehicle to airport landside planning, operation, and design and discussed possible strategies that can help airports generate revenue in the era of emerging AVs in the program year 2017-2018.

Quinton White

University of North Carolina

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Quinton White is a doctoral candidate in Economics at the University of North Carolina in Chapel Hill, NC. His research is in Empirical IO and Public Economics, with a focus on taxation in the aviation industry. Other research interests include vertical integration, price discrimination, machine learning methods, and the economics of networks. Before pursuing a Ph.D., He studied Economics and Sociology at Furman University. After working in Business and Football Operations for the Miami Dolphins for a year, Quinton worked at the U.S. Census Bureau as a Survey Statistician where he served as the primary analyst on the residential and home health care industries. Quinton is married with one child.

Quinton was the recipient of a 2017-2018 ACRP Graduate Research Award preparing research on "Taxation in the Aviation Industry: Insights and Challenges."

Jason Wong

Columbia University

Ph.D. Candidate
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Jason Wong is a doctoral candidate at Columbia University in Sustainable Development and a Research Affiliate at Laboratory for Aviation and the Environment of Massachusetts Institute of Technology. Jason is interested in the impact of technology and infrastructure in regional socioeconomic outcomes and environmental decision making. His dissertation focuses on improving individual carbon offsets, economic impacts of aviation connectivity, and climate change impacts on aviation. He also works on electricity infrastructure and energy poverty in India.

Originally from Hong Kong, Jason has since lived in Shanghai, Washington D.C., Charleston, SC, Miami, FL, Hamburg, Germany, and Boston, MA. He currently resides in New York City. Outside of teaching and research, he has developed a passion for languages. He speaks Cantonese, Mandarin, and German fluently and is currently learning French and Japanese.

Jason graduated *summa cum laude* from the University of Maryland with a B.S. in Environmental Science and Policy (Environmental Economics) with High Honors and a B.A. in Germanic studies. He also completed a Minor in Statistics and a Certificate in Science, Technology, and Society. He was a College Park Scholar in Science and Global Change, a National Oceanic and Atmospheric Administration Ernest F. Hollings Scholar and a German Academic Exchange Service Undergraduate Scholar. In 2013-14, he was a Phi Kappa Phi Walter and Adelheid Hohenstein Fellow. In 2015-16, he served as Lead Teaching Fellow at Columbia University. He won the 2017 Presidential Award for Outstanding Teaching by Graduate Student Instructors, the highest teaching honor bestowed upon a graduate student at Columbia.

Jason is a 2016-2017 ACRP Graduate Research Awardee preparing research on
"Blue Thinking: Connectivity Impacts on Regional Economies in the United States."

Brittany (Luken) Wright, Ph.D.

Georgia Institute of Technology

Manager at Bain & Company

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Brittany (Luken) Wright joined Georgia Tech as a doctoral student in Civil and Environmental Engineering in 2008 and received her doctorate in 2014 and an M.S. in Industrial Systems and Engineering in 2010. Her research focuses on investigating the impacts of early standby fees on airline customer service. Brittany received her B.E. in Civil Engineering from Vanderbilt University in 2008. She is the recipient of several notable fellowships and scholarships, including a National Science Foundation (NSF) Graduate Research Fellowship, and an Eisenhower Fellowship.

During the program year 2009-2010, Brittany won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Multi-Airport Choice Models for the New York Metropolitan Area: An Application Based on Ticketing Data."

Tim Wyatt

Conner Gwyn Schenck, PLLC

Attorney/Partner
Greensboro, NC
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Tim Wyatt is an attorney and partner with the Conner Gwyn Schenck law firm, focusing on litigation involving the construction of public infrastructures, such as airports and highways. He also performs legal research under ACRP Project 11-01 involving legal issues affecting public construction projects, such as environmental review and domestic preference requirements. Tim has completed Study Topic 4-04, "Buy America Requirements for Federally Funded Airports," and Study Topic 04-06, "The Role of the Airport Sponsor in Airport Planning and Environmental Reviews of Proposed Development Projects Under the National Environmental Policy Act (NEPA) and State Mini-NEPA Laws." He is a member of the Rockingham County (NC) Airport Authority.

During the program year 2009-2010, Tim won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Balancing Airport Capacity Requirements with Environmental Concerns: Legal Challenges to Airport Expansion."

Rebekah Yang

CNA and TEST, Inc.

Systems/Principal Engineer
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Rebekah Yang is a Systems Engineer at CNA, a non-profit research and analysis organization based in the Washington D.C. metro area. She works to support the Federal Aviation Administration in its efforts to modernization air traffic management. Rebekah is also a founder and principal engineer at Transportation Engineering Solutions and Technologies, Inc., a Transportation Engineering firm in Champaign, IL. TEST strives to provide sustainable consulting and software services for Transportation agencies and industry partners.

Rebekah received her Ph.D. (2017) from the University of Illinois at Urbana-Champaign with Dr. Imad Al-Qadi. She received her Master's degree also from Illinois and her Bachelor's degree from Swarthmore College. While at Illinois, her research interests focused primarily on evaluating the sustainability of Transportation infrastructure, specifically highway and airfield pavements.

Rebekah was part of the 2015–2016 ACRP Graduate Research Award program, which allowed her to conduct research on the application of life-cycle assessment to airfield pavements.

Kai Yin, Ph.D.

Vrbo, Expedia Group
Staff Data Scientist
Austin, TX
Email: yinkai1000@gmail.com

Kai Yin received his Ph.D. in Civil Engineering/Transportation Engineering from Texas A&M University in 2013. His academic advisor was Dr. Bruce Wang. His research interest was in Transportation Systems, which included connected and automated vehicles control, statistical models for transportation network, airport operations, and traffic signal performance analysis. He is currently working as a Staff Data Scientist at Vrbo, an Expedia Group brand, a leading digital marketplace company in travel industry. At Vrbo, he focuses on dynamic pricing, revenue management, online controlled experiment design and analysis.

During the program year 2010-2011, Kai won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Taxiway Aircraft Traffic Analysis at the Houston Airports."

Jingnan Zhao

Rutgers, The State University of New Jersey
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Jingnan Zhao is currently a doctorate candidate under the advisement of Dr. Hao Wang in the Department of Civil & Environmental Engineering at Rutgers, The State University of New Jersey. Her dissertation is focused on investigating the vehicle-pavement interaction and its impact on critical pavement responses. She received her Bachelor's degree at Southwest Jiaotong University in Chengdu, China, with a major in Civil Engineering. Jingnan received her Master's degree in Civil Engineering advised by Dr. Hao Wang from Rutgers University Her research has involved pavement management system, numerical modeling and analysis of flexible pavement in highway and airfield, and vehicle-pavement interaction.

During the program year 2018-2019, Jingnan won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "Investigation of Piezoelectric Energy Harvesting Potential at Airport for Green Energy Solutions."

Zhou Zhang

Amazon
Economist
Seattle, WA
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Zhou Zhang is an Economist at Amazon where she works on their Display Advertising program (branded ads on Amazon's home page) and their Sponsored Products program (the ads you see for specific products on the search page). She graduated with a Ph.D. from the University of Virginia in May 2016. Her background is in Empirical IO, with a focus on airlines, specifically examining the role of gates in determining the competitiveness of airline markets.

Before her doctorate, Zhou studied Mathematics and Economics at Vanderbilt University and worked for two years as an Analyst at Wachovia Bank (now Wells Fargo). She also spent ten months traveling around the world with her husband on their honeymoon.

During the program year 2015-2016, Zhou won an Airport Cooperative Research Program Graduate Research Award on Public-Sector Aviation Issues, preparing research on "The Effects of Mergers and Divestitures on Airline Fares."

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