

WiDS CENTRAL
MASSACHUSETTS
CONFERENCE

Meet today's Presenters



MARCH 2, 2020

ANDREA BAYAS ALBUJA



In **Andrea's** role as a Training Engineer at Mathworks, she delivers training sessions on Data Science and other related topics to a wide array of customers.

Andrea's role entails interfacing with customers to assist them with understanding their educational needs and suggesting content that would be helpful to their applications.

Andrea is a WPI Alum where she earned both her Bachelors and Masters of Science degrees in Mathematics. She also has a strong background in Data Science and in many other fields.

DR. ANDREA ARNOLD



Dr. Andrea Arnold is an Assistant Professor in the Department of Mathematical Sciences at WPI. Her research is in the field of inverse problems and uncertainty quantification, which involves estimating unknown system parameters using indirect observations and analyzing the changes in predicted outcomes due to changes in the inputs.

Dr. Arnold's work focuses on the design and analysis of efficient and robust nonlinear filtering algorithms for state and parameter estimation. She applies these algorithms in analyzing real-world data from areas of the life sciences and engineering, with a specific interest in patient-specific models for biomedicine.

DR. NANCY BAYM



Dr. Nancy Baym is a Senior Principal Researcher at Microsoft Research New England, where she conducts basic research into how people understand and act with new communication technologies in their relationships.

A pioneer in the field of internet research, Baym wrote some of the first articles about online community. With Jean Burgess, she is the author of *Twitter: A Biography* (forthcoming 2020, NYU). Her recognitions include the Frederick Williams Prize for Contributions to the Study of Communication and Technology awarded by the International Communication Association, the naming of the Nancy Baym Book Award by the Association of Internet Researchers, and an Honorary Doctorate from the Faculty of Information Technology at the University of Gothenburg.

Nancy earned a Ph.D. from the University of Illinois at Urbana Champaign.

DR. FERNANDA CAMPELLO



Dr. Fernanda Campello is a data scientist in the Dell Technologies Edge/IoT Division at VMware. As a data scientist, Fernanda works on developing analytics methodologies and use cases to gain insight and unlock the value from data, going from business and analytics problem framing, to model development and deployment.

Prior to joining the Dell Technologies Edge/IoT Division, Fernanda was a senior data science consultant at Dell EMC, developing analytics projects in several industries, including healthcare, utilities, finance, insurance, and biotech.

Fernanda holds a Ph.D. in Operations and Information Systems from the University of Alberta in Canada, a Master's Degree in Industrial Engineering and a Bachelor's Degree in Electrical Engineering from the Universidade Federal de Pernambuco, in Brazil.

DR. ESRA CANSIZOGLU



Esra Cansizoglu has been working on machine learning and computer vision problems in various domains: from understanding interior design to object localization for robotic perception.

Esra earned her Ph.D. in Electrical Engineering from Northeastern University and an MS in Computer Science from Boston University. She worked at Mitsubishi Electric Research Labs as a research scientist and later she joined the computer vision team at Wayfair working on image-based models for product recommendation.

Dr. Cansizoglu recently joined the **Facebook Boston** office as a machine learning engineer.

RACHEL JOHNSON



Rachel Johnson is an Application Engineer for the Aerospace Industry at MathWorks, where she focuses on data analytics and predictive maintenance with MATLAB.

Prior to MathWorks, Rachel worked as an aerodynamics and propulsion analyst for the Office of Naval Intelligence, and spent several years teaching high school math, physics, and engineering.

Rachel holds a B.S.E. in Aerospace Engineering from Princeton University, an MS in Aerospace Engineering from the University of Maryland, and an M.A.T. in Mathematics Education from Tufts University.

Rachel is also a WPI and former visiting scholar of the Massachusetts Academy of Math and Science at WPI.

MELANIE JUTRAS



Melanie is a seasoned professional with more than 20 years of experience in software engineering.

Melanie holds a BS and MS degrees in Computer Science as well as her most recent MS degree in Data Science from Worcester Polytechnic Institute.

Melanie works as a Data Scientist for The MITRE Corporation in Bedford, Massachusetts. Her areas of work and research include Robust and Sparse Principal Component Analysis, anomaly detection and dimension reduction techniques applied in the cybersecurity and healthcare domain.

AUSHI KAPURWAN



Arushi has been an integral part of the #womeninSTEM initiative and is involved in CUwiP, TechTogether and CreatedBy events.

Arushi is a USC Alum who loves to create products that benefit humankind by infusing technology and building collaborative teams. Her greatest achievements are those where she can collectively create a positive impact and help society.

Arushi is working as a software engineer at Engineering Development Group on Parallel Computing Technologies to optimize solvers in MATLAB.

DR. JEAN KING



Jean King joined the WPI community as the Peterson Family Dean of Arts and Sciences in 2017. She is a professor in the Department of Biology and Biotechnology.

Dr. King's research uses functional magnetic resonance Imaging (fMRI) to identify and monitor neuronal plasticity associated with addiction, ADHD, depression, fearfulness, anxiety, autism and neurological disorders (PD and TBI) in animal models with the hope of finding clues to help us understand these conditions in humans.

Prior to joining WPI, Jean was vice provost for biomedical research at the University of Massachusetts Medical School; a tenured professor of psychiatry, radiology, and neurology; and director of the university's Center for Comparative Neuroimaging.

PRESIDENT LAURIE LESHIN



Laurie Leshin was an accomplished leader in academia and government service before joining WPI. She had roles as the Dean of the School of Science at Rensselaer Polytechnic Institute, a scientist for the Mars Curiosity Rover mission, and as Deputy Director of NASA's Exploration Systems Mission Directorate. In that position Laurie oversaw NASA's future human spaceflight programs and activities.

Laurie also serves in leadership positions for many academic- and science-focused organizations beyond WPI.

DR. ELEANOR LOIACONO



Eleanor Loiacono is Professor of Information Technology and Data Science at WPI in the Robert A. Foisie School of Business.

Dr. Loiacono is the Founder and Director of the Inclusive Design and Accessibility (IDEA) Hub at WPI, which was established to address the needs of people with differing abilities across technologies and environments.

Eleanor's research centers on the intersection of technology and the user. For more than 20 years, Dr. Loiacono has focused on how people feel about the technology they use and how technologies, such as mobile apps and social media, can improve users' experiences.

DR. RODICA NEAMTU



Dr. Neamtu is a data mining researcher who investigates how to develop and leverage ground-breaking techniques to explore time series datasets at the confluence of theoretical computer science and application domains. These include medicine, neuroscience, economics, transportation, and complex decision making.

Rodica has more than fifteen years of teaching experience in various academic institutions and is committed to using her love and talent for teaching and research to empower others through education to make a difference in the world.

Rodica is also the Co-Founder and Co-Director of the WPI Bucharest Project.

DR. ELKE RUNDENSTEINER



Dr. Rundensteiner is the founding director of the WPI Data Science Program and Professor in Computer Science at WPI. Elke is also an internationally recognized expert in big data analytics.

Her recent research interests include scalable machine learning and knowledge discovery, event sensor stream analytics, intelligent decision making, and visual and computational big data analytics infrastructures.

Elke's work is been supported by government agencies including DARPA, NSF, NIH, DOE, and FDA, and by industry including HP, IBM, Verizon Labs, GTE, NEC, AMADEUS, Charles River Analytics, and by labs such as MITRE Corporation.

JAYA SHANKAR



Jaya Shankar leads an engineering team for compiling and generating efficient code for deep learning applications targeting hardware such as embedded GPUs and CPUs. Jaya has also worked on product development for C/C++ code generation and verification from MATLAB/Simulink products.

Jaya is a founding member of the GPU Coder product for generating CUDA code from MATLAB which won the 2018 Vision Product award at the Embedded Vision Alliance in the Software and Algorithms Category.

Jaya earned a MS in Electrical Engineering from Utah State majoring in signal/image processing domain.

DR. ERIN SOLOVEY



Erin T. Solovey is an Assistant Professor of Computer Science at WPI. Erin's research expertise is in emerging human-computer interaction modes and techniques, such as brain-computer interfaces, physiological computing, wearable computing, and reality-based interaction.

Erin's research is supported by the NSF and has received awards including the NSF/CRA Computing Innovation Fellowship and three ACM CHI Best Paper Award Honorable Mentions.

Erin received a BS in computer science from Harvard, and her MS and Ph.D. in computer science from Tufts University. Prior to joining WPI, she was a professor at Drexel University and a postdoctoral fellow in the Humans and Automation Lab at MIT.