Thank You!

Thank you for attending WiDS at Purdue.

We would like to thank all of the people that made this conference possible. The WiDS Stanford group for creating this event and encouraging women world-wide to host their own. All of our speakers and panelists, for taking the time out of their schedules to inspire us with their work in data science. The computer science department of Purdue for supporting us, help in organizational details, and providing funding for this event, especially the following individuals: David Gleich, Randy Bond, Kathy Moore, Pam Graf, Kelsey Vance, and Krysten Childres.

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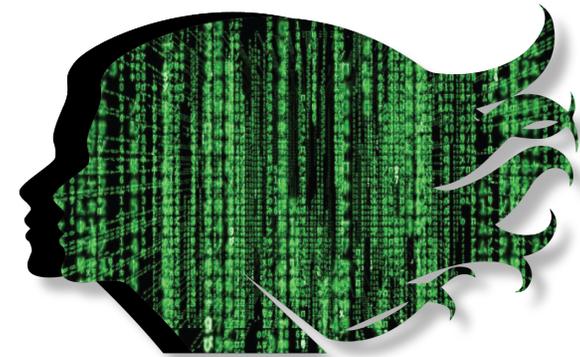ENTREPRENEURSHIP AND INNOVATION

Contact Us

Enjoying WiDS Purdue? Tweet about it! #WiDS2018

If you have any comments or suggestions, please feel free to email us:

Nicole Eikmeier: eikmeier@purdue.edu

Huda Nassar: hnassar@purdue.edu

WOMEN IN DATA SCIENCE

#WIDS2018

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Agenda

8:00	**COFFEE & REGISTRATION (LWSN COMMONS)**
9:00	**OPENING REMARKS (LWSN 1142)** **Nicole Eikmeier**, PhD Candidate in Mathematics, Purdue University
9:05	**WELCOME ADDRESS (LWSN 1142)** **Patrick Wolfe**, Hovde Dean of the College of Science, and Miller Family Professor of Statistics, Purdue University
9:15	**TALK (LWSN 1142)** **Sensing: Big Data to Make a Difference in Plant Science** **Melba Crawford**, Professor of Agronomy, Civil Engineering, and Electrical & Computer Engineering, Purdue University
9:50	**TALK (LWSN 1142)** **Universal Growth in Production Economies** **Simina Brânzei**, Assistant Professor of Computer Science, Purdue University
10:25	**TALK (LWSN 1142)** **Network machine learning: Using connections, communications, and transactions to improve classification** **Jennifer Neville,** Miller Family Chair Associate Professor of Computer Science and Statistics, Purdue University
11:00	**BREAK (LWSN COMMONS)**
11:30	**TALK (LWSN 1142)** **Deep geodata analysis with Divide & Recombine and domain knowledge** **Wen-wen Tung,** Associate Professor of Atmospheric Sciences, Purdue University

12:00	**LIVE-STREAM of STANFORD WiDS (LWSN 1142)**
	12:00 Opening Video and Remarks
	    Margot Gerritsen, Director of ICME, Stanford
	12:10 Welcome Address
	    Maria Klawe, President, Harvey Mudd College

Panelists

Carol Song

Senior Research Scientist and director of Scientific Solutions in Research Computing, Purdue University

Dr. Carol Song's current research interests include high-performance computing (HPC) and advanced cyberinfrastructure for domain science applications. Dr. Song has been leading Purdue's HPC effort in the NSF TeraGrid and XSEDE national scale HPC projects since 2007. She has had a leading role in many federally funded, interdisciplinary programs, including data interoperability, sustainable scientific software, CI-TEAM for training and education, and most recently as Principal Investigator of a $5M NSF data infrastructure building blocks (DIBBs) project "Geospatial Data Analysis Building Blocks". She received the Purdue OVPR "Seed for Success" Excellence in Research award each year in 2009-2014 & 2017. Dr. Song has funded and mentored more than 60 graduate and undergraduate students over the years and serves as a mentor through programs such as Women in HPC, Practice & Experience in Advanced Research Computing and Supercomputing. Before joining Purdue in 2005, she worked in industry for many years leading software product development and participating in creating medical imaging standards. Dr. Song received her PhD in computer science from the University of Illinois at Urbana-Champaign.

Nicole Kong

Assistant Professor of Library Science, Geographic Information Systems (GIS) Specialist, Purdue University

Dr. Nicole Kong received her PhD in Ecology from Penn State University. Her current research interests are in Geographic Information Systems (GIS), Geospatial data discovery, integration, visualization, and management. Dr. Kong currently serves as Chair of the GeoTech Committee, MAGIRT (Map & Geospatial Information Round Table) at the American Library Association. She is also the Education Board of Director for the Indiana Geographic Information Council (IGIC). Dr. Kong organizes GIS Day at Purdue, which connects Purdue students to cutting edge research and careers in GIS. Before joining Purdue, she worked as a Software Engineer and as the Lead GIS developer where she won the award for Best GIS Desktop Application in the KY GIS App contest.

Speakers

Sara Bigelow

Clinical Data Associate, Eli Lilly

Sara Bigelow has 2 years of service at Lilly and is currently a Clinical Data Associate. She interned at Lilly while completing her Masters in Data Science. Prior to Lilly she interned in several laboratories and worked for an oil analysis laboratory. After completing her bachelor's at Cameron she realized there was a need to understand data management when conducting scientific research and pursued a certificate in Data Science from IU. While completing the certificate program she realized she loved the coursework and applied for the master's program. Sara hopes to become a data scientist in the near future and utilize her background / experience to help advance data sciences at Lilly. Sara has a Bachelor's degree in Chemistry and Biology from Cameron University, a Master's degree in Data Science from Indiana University, and is working towards an MBA from Butler University.

Nicole Hunt

Director, Clinical Lab and Data Sciences, Eli Lilly

Nicole Hunt has 25 years of service at Lilly and started as an Assistant Technician in Biochemical Toxicology while attending Purdue as a Biochemistry major. She was drawn to working in a lab due to her love for working with data and being able to analyze it and draw insight from data. When a new department in Clinical Data Management emerged at Lilly, Nicole saw the opportunity to pursue her interest in data analysis within Lilly. Through the years she worked in Data Management and then Data Sciences as Lilly transitioned from a historically paper sourced model to electronic data collection. Now as a director in Clinical Lab and Data Sciences Nicole oversees the Oncology therapeutic area and hopes to guide the group into the future of data science with automation, standardization, and new methods of data collection. Nicole has a Certificate in Biochemistry from Purdue University, a Bachelor's degree in Business Management from Indiana Wesleyan University, and an MBA from Indiana Wesleyan University.

Agenda

12:30 Keynote Address: **When Data Science IS the Business!**
Leda Braga, CEO, Systematica Investments

1:05 Regional Check-in

1:10 Technical Vision Talk: **Healthcare Beyond the Horizon – Going Digital to Improve People's Lives**
Mala Anand, EVP, President, SAP Leonardo Data Analytics

1:30 **LUNCH (LWSN Commons)**

2:30 **TALK (LWSN B155 – ROOM CHANGE)**
Data Sciences in Clinical Trials
Nicole Hunt, Director, Clinical Lab and Data Sciences, Eli Lilly
Sara Bigelow, Clinical Data Associate, Eli Lilly

3:00 **PANEL DISCUSSION (LWSN B155 – ROOM CHANGE)**
Moderator
Huda Nassar, PhD Student in Computer Science, Purdue University
Panelists
Sara Bigelow, Clinical Data Associate, Eli Lilly
Melba Crawford, Professor of Agronomy, Civil Engineering, and Electrical and Computer Engineering, Purdue University
Nicole Hunt, Director, Clinical Lab and Data Sciences, Eli Lilly
Nicole Kong, Assistant Professor of Library Science, Geographic Information Systems (GIS) Specialist, Purdue University
Jennifer Neville, Miller Family Chair Associate Professor of Computer Science and Statistics, Purdue University
Carol Song, Senior Research Scientist and Director of Scientific Solutions in Research Computing, Purdue University

4:00 **RECEPTION (LWSN COMMONS)**

4:45 **JULIA WORKSHOP (LWSN 1142)**
4:45 Introduction to Julia
Jane Herriman, Julia Computing
5:45 Break
6:00 Julia for Data Science
Huda Nassar, PhD Student in Computer Science, Purdue University

Speakers

Melba Crawford

Professor of Agronomy, Civil Engineering, and Electrical & Computer Engineering, Purdue University

Dr. Melba Crawford's research interests focus on development of advanced methods for image analysis, including: manifold learning, active learning, classification and unmixing, and applications of these methods to hyperspectral and LIDAR data for agriculture and natural resource mapping and monitoring. She is currently co-leading a join initiative between the Purdue colleges of agriculture and engineering in development of advanced sensing technologies and analysis methodology for wheeled and UAV platforms, focused on high throughput phenotyping. Dr. Crawford is a Fellow of the IEEE, immediate Past President of the IEEE Geoscience and Remote Sensing Society, an IEEE GRSS Distinguished Lecturer, and the current Treasurer of the IEEE Technical Activities Board. She was a member of the NASA EO-1 Science Validation team and served on the NASA Earth System Science and Applications Advisory Committee and the advisory committee to the NASA Socioeconomic Applications and Data Center (SEDAC).

Simina Brânzei

Assistant Professor Computer Science, Purdue University

Dr. Simina Brânzei is an assistant professor of Computer Science at Purdue University. Before coming to Purdue, she spent two years at the Hebrew University of Jerusalem and a semester at the Simons Institute for the Theory of Computing at the University of California Berkeley. Her current research interests are in the area of Economics and Computation, including topics such as mechanism design and markets, and more generally, theoretical computer science.

Speakers

Jennifer Neville

Miller Family Chair Associate Professor of Computer Science and Statistics, Purdue University

Dr. Jennifer Neville received her PhD from the University of Massachusetts Amherst in 2006. She is currently an elected member of the AAAI Executive Council and she was recently PC chair of the 9th ACM International Conference on Web Search and Data. In 2012, she was awarded an NSF Career Award, in 2008 she was chosen by IEEE as one of "AI's 10 to watch", and in 2007 was selected as a member of the DARPA Computer Science Study Group. Her work, which includes more than 100 peer-reviewed publications with over 5000 citations, focuses on developing data mining and machine learning techniques for complex relational and network domains, including social, information, and physical networks.

Wen-wen Tung

Associate Professor of Earth, Atmospheric and Planetary Sciences, Purdue University

Dr. Wen-wen Tung received her PhD in Atmospheric Sciences from the University of California Los Angeles. She is the Principal Investigator for the Earth System Science Data Lab at Purdue. The lab conducts research that requires deep analysis of big datasets that target environmental and societal impacts, and uses leading-edge computational environments. Her research interests include Tropical Dynamics (Monsoons, Waves, Intraseasonal oscillation), Geoscience data science, and weather and climate dynamics intersecting with aviation/transportation, food, energy, and water nexus.