

Bios

Keynote speakers



Yulia R. Gel, Professor, University of Texas Dallas

Yulia R. Gel is Professor in the Department of Mathematical Science at the University of Texas at Dallas. Her research interests include statistical foundation of Data Science, inference for random graphs and complex networks, time series analysis, and blockchain data analytics. She holds a Ph.D in Mathematics, followed by a postdoctoral position in Statistics at the University of Washington. Prior to joining UT Dallas, she was a tenured faculty member at the University of Waterloo, Canada. She also held visiting positions at Johns Hopkins University, University of California, Berkeley, and the Isaac Newton Institute for Mathematical Sciences, Cambridge University, UK. She served as a Vice President of the International Society on Business and Industrial Statistics (ISBIS), and is a Fellow of the American Statistical Association.



Justin Smith, Sr. Director of Advanced Analytics, St. Luke's Health System

Justin Smith, Ph.D. leads and functions in many capacities as Senior Director of Advanced Analytics for St. Luke's Health System located in Boise, Idaho. St. Luke's is Idaho's largest employer. Dr. Smith leads multidisciplinary teams to build machine learning models that enable St. Luke's to improve operational efficiency, clinical care, and enhance understanding of business drivers. Dr. Smith employs a unique skill set of strong analytical skills and thought leadership as St. Luke's transitions from the world of advanced analytics to artificial intelligence. Dr. Smith has published numerous articles in peer-reviewed international journals. He holds a Ph.D. in the field of Neuroscience and a M.S. and B.S. in Research Psychology.

Invited Speakers



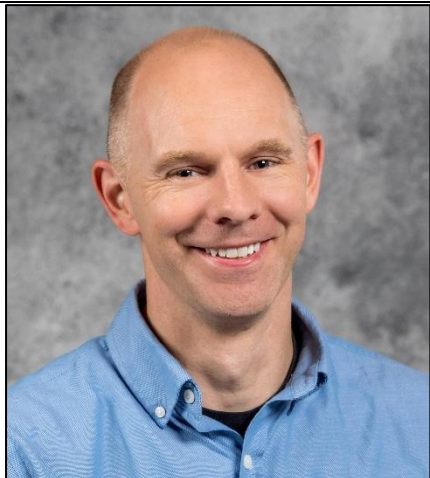
Cuneyt Akcora – Assistant Professor, University of Manitoba

Cuneyt Gurcan Akcora is an Assistant Professor of Computer Science and Statistics at the University of Manitoba, Canada. He received his M.S. from State University of New York at Buffalo, the USA, and his Ph.D. from the University of Insubria, Italy. His primary research interests are Data Science on complex networks and large-scale graph analysis, with applications in social, biological, IoT and Blockchain networks. He is a Fulbright Scholarship recipient, and his research works have been published in leading conferences and journals including IEEEtran, VLDB, ICDM, SDM, IJCAI, and ICDE.



Anu Amallraja – Lead Clinical Bioinformatics Analyst, Avera Cancer Institute

Anu Amallraja is a Lead Clinical Bioinformatics Analyst in the Department of Cancer Genomics at the Avera Cancer Institute. She has an undergraduate degree in Biotechnology Engineering from Manipal Institute of Technology, India, and an MS in Biological and Medical Informatics from San Diego State University. She has over 5 years of experience in clinical cancer genomics creating bioinformatics tools and analyzing next-generation sequencing data. Her goal is to utilize software and data to inform decisions made by clinicians so patients receive the best possible therapeutic options.



Travis Burgers Scientist/Engineer – Raven Industries

Travis Burgers enjoys a well-designed experiment, digging through data and good scientific communication. His passion for experimentation and data blossomed during his PhD research with medical devices and bones at the University of Wisconsin-Madison. Travis worked in medical research and medical devices for over a decade and among his accomplishments are two Philips Healthcare North America awards: for Innovation and for Excellence.

Travis is currently applying his interest in research to precision agriculture as a scientist/engineer in the Data Analytics team at Raven Industries, where he uses data in product development and system analysis to solve great challenges. There he has several patents and wrote a paper which demonstrated Raven's automatic boom leveling system outperforms the competition. Travis also mentors graduate students to design experiments and dig through data

	<p>in mechanical and biomedical engineering at South Dakota State University and the University of South Dakota.</p>
	<p>Jiyul Chang – Senior Lecturer, South Dakota State University Dr. Chang is a Senior Lecturer in Agronomy, Horticulture, and Plant Science Department, South Dakota State University. He has been working for Precision Agriculture projects since his Master’s. His main works were i) describing/analyzing spatial/temporal variation of crop yields and soil nutrients in crop fields to identify agronomic problems, ii) using images collected by satellites, airplanes, or drones to identify stressed crop plants by water, weeds, insects, or disease, and iii) making variable rate application maps of fertilizers and seeds using GIS software.</p>
	<p>Lance Cundy – Economist, Federal Reserve Bank Lance Cundy is an economist working at the Federal Reserve Bank of Minneapolis. Currently, he performs validations of the Federal Reserve System’s supervisory stress test models. Prior to this role, he rotated throughout the System as a Quantitative Fellow working on a diverse set of quantitative projects. Lance provides expertise in econometrics and model risk management and has experience with several market and credit risk portfolios. His research is focused on applied econometrics, and he has taught as an adjunct at Hamline University. Lance holds a Ph.D. in Economics from the University of Iowa and an M.S. in Mathematics from South Dakota State University.</p>
	<p>Gerald Fahner - Senior Principal Scientist, FICO Dr. Gerald Fahner is Senior Principal Scientist in FICO’s Scores division. He specializes on innovative algorithms that turn data and domain knowledge into superior insights, predictions, and decisions. Gerald is also responsible for the core algorithms underlying FICO’s Scorecard development platform. His work on causal modelling won the Best Paper award at the Credit Scoring and Credit Control XI conference. Prior to joining FICO in 1996, he served as a researcher in artificial intelligence, neural networks and robotics at the International Computer Science Institute in Berkeley, and earned his Computer Science doctorate from University of Bonn.</p>
	<p>Craig Jorgensen – Customer Success Manager, Query AI Craig Jorgensen is a Technical Account Manager with Query.AI where he is actively assisting members of the Cybersecurity industry with emerging use-cases. An SDSU alum, with a Bachelor’s of Computer Science, he has</p>

	<p>expanded from developing code to streamlining analysis of disparate data sources.</p>
	<p>Edward Krueger – Channel Partners</p> <p>Michael Lim – Vice president of Data Science and Analytics, TransUnion</p> <p>Michael Lim is Vice President of Data Science and Analytics for TransUnion. In this role, Mr. Lim leads a team focused on developing complex solutions for the residential housing and automotive finance sectors. Before joining TransUnion, Mr. Lim had been with Cerberus Capital Management where he held a variety of roles from trading distressed mortgages to managing international dealer risk at GMAC. Prior to this role, he was an RMBS trader at Lehman Brothers and a consultant advising Freddie Mac’s Investments and Capital Markets division. He began his career with HSBC as a statistical programmer. Mr. Lim holds a Bachelor’s degree in Chemistry and Mathematics from Creighton University, a Master’s in Biostatistics and Epidemiology from Boston University, and is currently pursuing an MBA from the University of Southern California Marshall School Of Business.</p>
	<p>Himel Mallick – Associate Principal Scientist, Biostatistics, Merck Research Laboratories</p> <p>Himel Mallick is an Associate Principal Scientist at Merck Research Laboratories. His research interests include genomics data science, statistical bioinformatics, computational metagenomics, machine learning, and Bayesian biostatistics. Himel is particularly known for his R/Bioconductor packages MaAsLin2 (>10K downloads) and MelonnPan (>100 citations) and for his publications in top-tier scientific journals including Nature and Lancet. He is a recipient of multiple awards including the ASA Best Paper Award (2015), AMS-Simons Grant (2016), and IMS New Researcher Award (2017). Prior to Merck, Himel was a postdoctoral fellow at Harvard and a PhD candidate of Biostatistics at the University of Alabama at Birmingham.</p>
	<p>Volodymyr Melnykov – Professor, The University of Alabama</p> <p>Volodymyr Melnykov received his MS degree in Applied Statistics from Bowling Green State University (2005) and PhD in Statistics from Iowa State University (2009). Currently, Volodymyr is a Professor of Statistics at the University of Alabama, where he also serves as an Associate Department Head in the Department of Information Systems, Statistics, and Management Science. Volodymyr's research interests include finite mixture models, model-based cluster analysis, data visualization, and open source software.</p>



Yana Melnykov – Assistant Professor, The University of Alabama

Dr. Melnykov received her Master's degree in Applied Statistics from North Dakota State University in 2013 and PhD degree from the University of Alabama in 2017. Currently, she is an Assistant Professor at the University of Alabama. She also holds a position of senior statistician in the Institute of Data and Analytics at UA. Dr. Melnykov's research interests lie in the areas of change point inference and finite mixture modeling.



Hossein Moradi – Assistant Professor, South Dakota State University

Hossein is an Assistant Professor of Statistics at South Dakota State University. His research interest is the development of statistical models for spatial and spatiotemporal data, functional data, and multivariate data for making inferences from massive datasets, all motivated by the desire to tackle scientific problems. Hossein was a member of Research Network for Statistical Methods for Atmospheric and Oceanic Sciences as Postdoctoral fellow. Prior to that, he was at Virginia Commonwealth University where he received his Ph.D. in System Modeling and Analysis and his Master in Operations Research. He received his Master in Mathematical Statistics from Tarbiat Modares University and his Bachelors in Statistics in Statistics from University of Mazandaran.

Danica Ommen – Assistant professor, Iowa State University



Kayli Rageth – Principal Clinical Intelligence Analyst – Avera

Kayli Rageth is a Principal Clinical Intelligence Analyst for Avera Health with a masters' degree in Public Health from South Dakota State University. She has 4 years of experience in clinical genomics, developing clinically valid prognostic and diagnostic tools, as well as, 2 years of experience working with physicians, across a multitude of care sectors, developing progressive disease predictive modeling tools. The aim is to improve patient care via direct decision support for highly informed decision making.



Ali Rahnavard - Assistant Professor, George Washington University

Ali Rahnavard is an Assistant Professor of Biostatistics and Bioinformatics at George Washington University. His lab work on molecular epidemiology and dynamics of infectious diseases particularly investigates the SARS-CoV-2 dynamics and host response supported by an NSF RAPID and an NSF Ecology and Evolution of Infectious Diseases Awards. His lab develops computational approaches and software to analyze omics data, especially microbiome and metabolites. Prior to George Washington University, Dr. Rahnavard did a postdoc on the human microbiome and metabolites at the Broad Institute and Harvard.



Shuchismita Sarkar – Assistant Professor, Bowling Green State University

Shuchismita Sarkar is an assistant professor in the Applied Statistics and Operations Research department of Bowling Green State University. She obtained her PhD in Applied Statistics from University of Alabama. Her research interest is computational statistics and model-based clustering.



Christopher Saunders – Professor, South Dakota State University



Bonny Specker - Professor Emerita, Health and Nutritional Sciences – SDSU

Dr. Bonny Specker is Professor and Chair Emerita at South Dakota State University. She received her Ph.D. in Epidemiology from the University of Cincinnati and spent fifteen years on the faculty at Cincinnati Children’s Hospital Medical Center. In 1997, she moved to South Dakota as the E.A. Martin Endowed Chair in Human Nutrition. She has published extensively in bone, calcium, and vitamin D metabolism and in maternal and child health epidemiology. Since 2020 she has monitored the COVID-19 situation in South Dakota, posted regular blogs, and produced videos with the City of Brookings to educate the general public on basic epidemiological principles. Upon retiring in 2021, she has written a historical fiction titled “Spot On: The 1846 Faroe Islands Measles Outbreak,” inspired by the non-fictional investigation of the Danish physician and epidemiologist Peter Panum, and is currently writing her second historical fiction on the 1876-1877 Lake Winnipeg smallpox outbreak.



Priya Swaminathan - Clinical Bioinformatics Analyst, Avera Cancer Institute

Padmapriya “Priya” Swaminathan is a Clinical Bioinformatics Analyst with the Genomics Oncology research team led by Dr. Tobias Meissner at the Avera Cancer Institute Center for Precision Oncology. She specializes in transcriptomics, genomic pathway analysis and visualization. She uses her expertise to visualize and associate cancer pathways enriched in specific patient samples in N-of-1 setting and thus helps the goal of developing personalized cancer treatments for each patient. Priya obtained her Master’s degree in Statistics with bioinformatics specialization from South Dakota State University in 2014. She worked as a bioinformatics research associate in the same university until 2019. She performed differential gene expression analysis of various datasets and helped uncover potential mechanisms associated with plant survival under extreme environments and mouse macrophage cell differentiation. In her current role, she also supports development and testing of Clinical Trial App and contributes her expertise to other projects. She would like to develop research interests in machine learning and tumor microbiome and contribute to novel solutions in the field of Precision Medicine.



Susan Vanderplas – Assistant professor, University of Nebraska – Lincoln

Susan Vanderplas is an assistant professor in Statistics at the University of Nebraska Lincoln. She previously worked at the Center for Statistics and Applications in Forensic Evidence at Iowa State University. Her research interests include statistical forensics, visualization and perception of statistical graphics, and data science methods.



Yang Wang – Assistant Professor, College of Charleston

Yang Wang is an Assistant Professor of Statistics in the Department of Mathematics, College of Charleston. She obtained her Ph.D. degree from the University of Alabama. Her research areas include Computational Statistics and Machine learning. She is particularly interested in Finite Mixture Modeling and Model-based Cluster analysis. Recently, her work is focused on developing Conditional Mixture Modeling.



Sommer West - Data Scientist, Capital Services

Sommer West attended University of South Dakota and completed an undergraduate degree in Mathematics and a graduate degree in Business Analytics. Since graduating, Ms. West has worked at CAPITAL Services as a Data Scientist in the Portfolio Analytics and Risk Department. She is the lead modeler for acquisition scorecards, researching various modeling techniques to improve model accuracy and increase overall profitability.



Kwanghee Won – Assistant Professor, South Dakota State University

Kwanghee Won received his M.S and Ph.D. degrees in Computer Engineering from Kyungpook National University, South Korea in 2007 and 2013 respectively. He is an assistant professor of Computer Science at South Dakota State University that he joined in 2018. Previously, he worked as a visiting scholar at University of Nebraska Omaha and a postdoctoral research associate at University of Nebraska Lincoln from 2015 to 2017. His research interests include deep neural network, computer vision and intelligent systems.



Bing Xu- Biostatistician, PhD Avera Cancer Institute

Bing Xu is a biostatistician in the Department of Cancer Genomics at the Avera Cancer Institute. She completed her undergraduate education in Plant Science and Technology in Huazhong Agricultural University in China. She then moved to South Dakota, where she graduated with a doctoral degree in Biological Science and a master in Statistics from South Dakota State University. She has been working with clinical data for the past six years. Her interest is to “Let the data do the talking” through summarizing and analyzing real world data.



David Zeng - Assistant Professor, Dakota State University

David received his PhD at University of California, Irvine specializing in Information Systems.

David's Teaching Interests include Predictive Analytics for Decision-making, Programming for Data Analytics (Python), Business Intelligence & Visualization, Deep Learning, AI Applications, Applied AI & applications, and Strategy & Application of AI in Organizations. David's research has been published at top-tier, peer-reviewed journals including MIS Quarterly, and has been funded by both internal and external grants. David received the Merrill D. Hunter Award of Excellence in Research in 2020. David serves as the Director of Center for Business Analytics Research (CBAR): <https://dsu.edu/research/madison-cyber-labs/cbar.html>; more on CBAR: <https://www.siouxfalls.business/dsu-labs-goal-helping-humans-work-better/>



Yingying Zhang –Assistant Professor, University of South Alabama

Dr. Yingying Zhang is an assistant professor at the University of South Alabama. Prior to joining the USA, she got her Ph.D. in applied statistics at the University of Alabama. Right now her research interests include clustering heterogeneous data with complex structures, high-dimensional data analysis, and data visualization.

Workshop instructors



Cuneyt Gurcan Akcora – Assistant Professor, University of Manitoba

Cuneyt Gurcan Akcora is an Assistant Professor of Computer Science and Statistics at the University of Manitoba, Canada. He received his M.S. from State University of New York at Buffalo, the USA, and his Ph.D. from the University of Insubria, Italy. His primary research interests are Data Science on complex networks and large-scale graph analysis, with applications in social, biological, IoT and Blockchain networks. He is a Fulbright Scholarship recipient, and his research works have been published in leading conferences and journals including IEEEtran, VLDB, ICDM, SDM, IJCAI, and ICDE.



Himel Mallick – Associate Principal Scientist, Biostatistics, Merck Research Laboratories

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Negassi Tesfay, Business Analyst II, Premier Bankcard

Negassi Tesfay is a Business analyst at Premier Bank card. Before joining Premier, he worked as a data scientist at ValidiFi and data analyst at SDM data mining and consulting Inc. He completed his Masters in Data Science at South Dakota State University and his Bachelor's degree in Statistics at the University of Asmara, Eritrea.