

Engaging Scientists to Prevent Harmful Exploitation of Advanced Data Analytics and Biological Data-- A Workshop Series

Committee

Devika Madalli

Co-Chair

Devika Madalli, Ph.D. is a Professor at the Documentation Research and Training Centre and served as an Adjunct faculty, DISI, University of Trento, Italy.

Dr. Madalli is a member of the Technical Advisory Board (TAB) of the Research Data Alliance.

Dr. Madalli is a member of the Karnataka Evaluation Authority. She serves as the chair of WG committee of OpenAccessIndia. Prof. Madalli is an expert consultant to Commonwealth of Learning, UNESCO, UNFAO OECD Tech, IEEE Access, IASLIC bulletin, DJLIT. Dr. Madalli has authored several scholarly articles published in national and international journals and conferences. Having professional experience of 27 years at Indian Statistical Institute, her main interest is to work towards the goal of “Knowledge for All”. Her interest lies in the area of Open learning resources, Open Data Repositories and Data Management, Knowledge Organization and application of facetization in Information Systems, Information Infrastructures, Agrisemantics, Digital Libraries, Semantic Web technologies, Faceted Ontologies, Content Management System, multilingual information services.

Nathan D. Price

Co-Chair

Nathan Price, Ph.D. is Chief Scientific Officer of Thorne HealthTech. Previously he was CEO of Onegevity, an AI health intelligence company that merged with Thorne prior to its IPO in 2021. He spent much of his earlier career as Professor and Associate Director of the Institute for Systems Biology (now on leave), co-director with biotechnology pioneer Lee Hood of the Hood-Price Lab for Systems Biomedicine, and is Affiliate Faculty at the University of Washington in Bioengineering and Computer Science & Engineering. In 2019, he was named as one of the 10 Emerging Leaders in Health and Medicine by the National Academy of Medicine, and in 2021 he was appointed to the Board on Life Sciences of the National Academies of Sciences, Engineering, and Medicine.

Elvan Ceyhan

Member

Elvan Ceyhan, Ph.D., is currently an associate professor at the Department of Mathematics and Statistics of Auburn University. Previously he served as the deputy director of SAMSI and an associate professor at Statistics Department of NC State University, associate professor at the Statistics Department of University of Pittsburgh, associate professor at the Mathematics Department of Koç University (KU), Turkey). His research interests are machine learning and data science (pattern recognition, classification, and clustering); random geometric graphs; network optimization; spatial point pattern analysis; statistical methods for medical data and image analysis. He was chosen as an “elected member” of International Statistical Institute in 2011. Also, he was elected and served as a member of BoD of International Association of Statistical Computing between 2012-2016 and “TWAS Young Affiliate Fellow” in 2012-2016 and received the International Outgoing Fellowship grant from REA of European Union in 2012, and a member of GYA in 2012-2017.

Yoke-Fun Chan

Member

YokeFun Chan, Ph.D. is currently the Head of Department and Professor of Virology at the Department of Medical Microbiology, Faculty of Medicine, University of Malaya, Malaysia. She leads a virology laboratory with research interests in epidemiology and pathogenesis of emerging viruses such as enterovirus A71, chikungunya, and respiratory viruses. Her research focuses on enterovirus A71, an emerging virus that causes severe neurological disease and hand, foot and mouth disease. Specifically, she is developing vaccines, antivirals and education tools for this highly preventable disease common in children. With more than 20 years of research experiences, she has over 100 publications, and have been involved in many research programs and grants at both national and international levels. Professor Dr. Chan serves as the editor in PLOS Neglected Tropical Diseases and BMC Infectious Diseases. She is an alumnus of Global Young Academy and Young Scientists Network-Academy Sciences of Malaysia. She is the winner of L'Oréal-UNESCO Malaysia National Fellowship 2014, L'Oréal-UNESCO International Rising Talents 2015, and ASEAN-US Science Prize for Women 2020.

Nikhil Dave

Member

Nikhil Dave, MS. is an incoming Business Analyst at McKinsey & Company, who recently completed a Master of Science in Biology and two Bachelor of Science degrees in Innovation in Society and Neuroscience at Arizona State University (ASU). Alongside his expansive research experience, beginning at age 14 and including multiple publications and patents, Nikhil also served on the Arizona Board of Regents as a Student Regent from 2020 to 2022. He led several critical projects around innovation in healthcare and biotechnology, including leading a team to win the XPRIZE \$1M Next-Gen Mask Challenge. Nikhil also worked in ASU's Applied Futures Laboratory, where he planned and led a 4-day workshop titled "The Future of Biological Big Data", which brought together biotechnology and pharmaceutical executives, venture capitalists, renowned academics, biosecurity agency members, and policy makers.

Lydia E. Kavraki

Member

Lydia Kavraki, Ph.D. is the Noah Harding Professor of Computer Science, professor of Bioengineering, professor of Electrical and Computer Engineering, and professor of Mechanical Engineering as well as the Director of the Ken Kennedy Institute at Rice University. Prof. Kavraki's research interests span robotics, AI, and biomedicine. In robotics and AI, she is interested in enabling robots to work with people and in support of people. Her research develops the underlying methodologies for achieving this goal: algorithms for motion planning for high-dimensional systems with kinematic and dynamic constraints, integrated frameworks for reasoning under sensing and control uncertainty, novel methods for learning and for using experiences, and ways to instruct robots at a high level and collaborate with them. Her research blends her extensive interdisciplinary background in computer science, artificial intelligence, machine learning, bioengineering and biomedical sciences promoting the convergence of these disciplines.

Kowk Yan Lam, Ph.D. Professor Lam Kwok Yan is a renowned Cyber Security researcher

Georg Langs

Member

Georg Langs, Ph.D. is full professor of machine learning in medical imaging at the Department of Biomedical Imaging and Image-guided Therapy at Medical University of Vienna. He is the director of the Computational Imaging Research Lab (www.cir.meduniwien.ac.at), a division of the department. Georg Langs scientific focus is on machine learning in the area of precision medicine, and medical imaging. His lab is developing methodology for disease course and treatment response prediction in real life clinical data including biases and confounders, computational neurosciences, and the bridging of imaging phenotypes and biological processes. Georg Langs studied Mathematics at the Vienna University of Technology (MSc) and Computer Science at the Graz University of Technology (PhD). He is advisor to the UNI ZODIAC action, and member of the International Society of Strategic Studies in Radiology Emerging Leaders Club. He was a PostDoc at the Applied Mathematics Laboratory at Ecole Centrale de Paris (2007-2008), and a Research Scientist at the Computer Science and Artificial Intelligence Lab at Massachusetts Institute of Technology (2009-2011), where he remains a research affiliate and member of the Medical Vision Group.

Suryesh Namdeo

Member

Suryesh Namdeo, MS. works at the DST Centre for Policy Research, Indian Institute of Science, Bangalore as the Program Officer of the DST Science, Technology and Innovation Policy Fellowship Program. He also works as a Consultant at the United Nations Office for Disarmament Affairs on matters related to Biological Weapons Convention. His expertise is in the areas of science diplomacy, science policy, molecular biology and biosecurity. He had the unique privilege to be a co-author and signatory of the Seoul Youth Declaration for Disarmament and the Youth Declaration for Biosecurity. He is a member of the Indian National Young Academy of Sciences and contributes to its science diplomacy efforts. He holds a PhD in molecular biology from the Max Planck Institute for Biology, Tuebingen, Germany. He has been trained extensively in science diplomacy through programs such as Warsaw Science Diplomacy School, Sao Paulo School for Science and Innovation Diplomacy, and the UNODA Youth4Biosecurity program.

Vanny Narita

Member

Vanny Narita Ph.D., is a Senior Officer in Science and Technology Division, the ASEAN Secretariat and Assistant Professor at the International University Liaison Indonesia. Previously, she was the expert coordinator of the National Innovation Committee of the Republic of Indonesia, an independent body reporting directly to the President of the Republic of Indonesia.

She has been working on Hepatitis-B and dengue recombinant proteins within a national consortium of vaccines and medicine led by WHO-acknowledged company, PT Bio Farma, as well as on antibiotic resistance in human-impacted environments as a visiting researcher at the University of Helsinki, Finland. Currently, she is responsible for ASEAN science diplomacy, managing regional cooperation and policy development in science, technology and innovation.

She received awards as World Economic Forum Young Scientist New Champion, ASEAN-U.S. American Association for the Advancement of Science (AAAS) Science and Technology Fellow and Inter Academic Panel-UNESCO Fellow of World Science Forum. She is a member of the Organisation for Women in Science in the Developing World, UNESCO, alumni of the Global Young Academy and the Ambassador for Indonesia of the International Society of Microbial Ecology. She was the Program Director of Indonesia's National Young Academy of Sciences and a Steering Committee Member of the International Network for Governmental Science Advice (INGSA) - Asia.

Dr Narita graduated from the University of Tennessee, Knoxville, U.S., in Biochemistry, Cellular and Molecular Biology. She received various training, including on Digital Economy by Singapore – the U.S. and on Foresighting by CSIRO, Australia.

Mei Ngan

Member

Mei Ngan is a scientist at the National Institute of Standards and Technology (NIST). Her research focus includes evaluation of face recognition and tattoo recognition technologies. She is currently involved in a number of key face recognition testing activities at NIST, including leading the Face Recognition Vendor Test (FRVT) MORPH activity, a project focused on addressing the use of image manipulation to exploit face recognition in certain identity credentials. Mei has authored a number of technical publications on topics including face recognition with face masks, face morph detection, and facial age and gender estimation. Her publication of a seminal open tattoo database for developing tattoo recognition research was recognized with a Special Contribution Award at the 2015 IEEE International Conference on Identity, Security and Behavior Analysis. Mei was awarded the Department of Commerce Gold Medal Award in 2020 and was a recipient of the 2020 Women in Biometrics Award, a globally-recognized award honoring innovative women in the biometrics field.

Kok Keng Tee

Member

Kok-Keng Tee, Ph.D. is an Associate Professor in University of Malaya (UM) and an adjunct Associate Professor at the School of Medical and Life Sciences, Sunway University in Malaysia.

His research interest focuses on the genetic and evolutionary characterization of blood-borne and respiratory viruses. His work has led to the discovery of several novel virus strains (or genotypes) circulating in the region, and the development of phylodynamic analysis of viral transmission networks that enables regular monitoring of the emergence and evolution of expanding transmission clusters. His achievements have been recognized through several national and international awards, including the 57th Meeting of Nobel Laureates in Physiology and Medicine, Lindau (2007), 15th CROI Young Investigator Award (2008), UM Excellence Award (Outstanding PhD Student) (2009), Daiwa Adrian Prize (2010), 10th National Academic Award (nomination) (2016), UM Excellence Award (Outstanding Young Researcher) (2017), and American Society for Microbiology (ASM) Country Ambassador (2022).

Kathleen M. Vogel

Member

Kathleen Vogel, Ph.D. is Professor at the School for the Future of Innovation in Society at Arizona State University (ASU). She is also a Senior Global Futures Scientist, Julie Ann Wrigley Global Futures Laboratory at ASU. She has served in the U.S. Department of State as a Jefferson Science Fellow in the Office to Monitor and Combat Trafficking in Persons and as William C. Foster Fellow in the Office of Proliferation Threat Reduction in the Bureau of Nonproliferation. Vogel has also spent time as a visiting scholar at the Woodrow Wilson International Center for Scholars, Cooperative Monitoring Center, Sandia National Laboratories, and the Center for Nonproliferation Studies, Monterey Institute of International Studies. Vogel holds a Ph.D. in bio-physical chemistry from Princeton University. Vogel's overall research interests relate to the study of knowledge production on security and intelligence problems. Vogel was selected as an Alan Rutherford Fellow, The Alan Turing Institute, UK (2018-2019). Vogel has previously served on the Committee on Assessing Fundamental Attitudes of Life Scientists as a Basis for Biosecurity Education, Policy and Global Affairs Division, U.S. National Research Council, 2007-2009.