

Pitfalls of Artificial Intelligence

NSTF/proSET Discussion Forum

Day 2

19 May 2023

Speakers Biographies



Day 2: 09:10-09:40

"A legal framework for AI. The example of European legislation."

Prof Georg Borges is a Professor of Civil Law, Legal Informatics, German and International Business Law and Legal Theory and the managing director of the Institute for Legal Informatics at Saarland University, Germany. From 2004 to 2014, he was Professor of Law at Ruhr-University Bochum. Beside this, he was also a Judge at the State Court of Appeals, Hamm Circuit. Since February 2023, he is also a distinguished visiting professor at the University of Johannesburg, Faculty of Law.

As an expert on IT Law and on law and informatics, Prof. Borges authored several books and numerous articles in the field. Prof. Borges is involved in numerous projects in the field of IT and legal informatics. Currently, a focus of his interest is on the legal framework of AI.



Day 2: 09:40-10:10

Embracing Human-Centred Artificial Intelligence: Towards establishing an AI innovation and capacity development ecosystem in South Africa

Prof Deshen Moodley is an Associate Professor in the Department of Computer Science at the University of Cape Town (UCT) and the co-director and co-founder of South Africa's national Centre for Artificial Intelligence Research (CAIR). He joined the University of Cape Town in July 2016 after serving 13 years as an academic in the Computer Science department at the University of KwaZulu-Natal. He currently leads the Adaptive and Cognitive Systems Lab in the AI Research Unit at UCT. His research explores adaptation and cognition in AI systems. In particular he explores different artificial intelligence techniques to create augmented AI systems where the human user works interactively and cooperatively with the AI system. He has explored AI systems across diverse domains, including the health, energy, finance and earth observation domains. He is currently researching the design of human centred AI systems for scientific knowledge discovery and interactive decision making.

UCT is a member of the NSTF.

Mr Neil Kramm is a sociologist and an Educational Technology Specialist Academic at the Centre of Higher Education Research, Teaching and Learning



Day 2: 10:10-10:40

AI is here to stay: what this means for our understanding of higher education teaching, learning and assessment

(CHERTL) at Rhodes. His interest in teaching and learning is centred on blended learning and integrating technology in teaching, learning and assessment, focusing on the influence of AI on assessment.



Day 2: 10:40-11:10

What are the implications of the development of AI for leadership in government, business, research, and society?

Prof Fulufhelo Nelwamondo is the CEO of the National Research Foundation of South Africa. He holds a PhD in Electrical Engineering, with specialisation in Computational Intelligence from the University of the Witwatersrand. He was a Postdoctoral Fellow at the Graduate School of Arts and Sciences at Harvard University, and was the youngest South African to receive the prestigious Harvard-South Africa Fellowship. Fulufhelo is a registered Professional Engineer, a Senior Member of the Institute of Electronic and Electrical Engineers (IEEE), a senior member of the Association of Computing Machinery (ACM), amongst others. Prior to his current role, he held executive positions at the Council for Scientific and Industrial Research, and has served in several Boards, Councils, Ministerial Task Teams and Advisory committees. Fulufhelo is passionate about the Fourth Industrial Revolution, particularly in the potential impact its research and technologies can bring in the advancement of humankind, thereby addressing the social ills of poverty, unemployment and inequality. He has been a recipient of many awards, for his contribution to Science, Engineering and Technology. In 2017, he was awarded the Order of Mapungubwe in Silver, the highest civilian honour bestowed by the President of the Republic of South Africa. Fulufhelo has worked in areas of advanced modelling, information security, data science, and artificial intelligence, and is a Visiting Professor at the University of Johannesburg's Institute of Intelligent Systems

Mr Krish Chetty serves as a Research Manager at the Human Sciences Research Council's Equitable



Day 2: 11:10-11:40

What does AI mean for increasing inequality in South Africa?

Education and Economics Division. He has earned a master's degree in Knowledge and Information Management from the University of Stellenbosch and is currently pursuing his PhD in Computing Science at Nelson Mandela University. Krish's primary research interests revolve around the social implementation of innovative technologies to combat poverty, inequality, and unemployment. His extensive work encompasses the fields of Artificial Intelligence, Knowledge Management, Digital Inclusion, and Renewable Energy. As an active contributor to the South African BRICS Think Tank, Krish has shared valuable insights on these subjects with fellow experts.

The HSRC is a member of the NSTF under the Science Councils and Statutory Bodies sector.



Day 2: 11:40-12:10

AI in Manufacturing: Risk or Opportunity?

Mr Vinesh Maharaj is the Director within the Operations Transformation Department of PwC South Africa and has been working with clients in the Energy, Utilities, Resources and Industrial Manufacturing industries since 1995. He is the South African leader of the Smart Manufacturing practice. His experience covers a wide range of areas, with specific expertise being obtained in Industrial Automation and Control, Manufacturing Execution Systems, and IT/OT Integration. He is a registered professional engineer with the Engineering Council of South Africa and a Certified Director with the Institute of Directors. He serves on the executive committee of the Manufacturing Enterprise Solutions Association (MESA) Africa and is an advisor to the board of directors of the Society for Automation, Instrumentation, Mechatronics and Control (SAIMC).

SAIMC is a member of the NSTF under the proSET sector.