



PROGRAMME

# NEMISA 2023

DIGITAL SKILLS COLLOQUIUM

15-17 FEBRUARY 2023

Scaling data skills for multidisciplinary impact



Time	Programme Directors: Nkosikhona Msweli , Sibukele Gumbo and Sarah Jembere
09:00 – 10:00	Arrival and Registration
10:00 – 10:10	Opening and Welcome   Prof Singh
10:10 – 11:30	Research Proposal and Thesis Report writing   Prof Nixon Muganda Ochara
11:30 – 11:45	Tea Break
11:45 – 13:00	Transforming the post-graduate supervision space   Prof Wallace Chigona
13:00 – 13:10	Factors Influencing Government's Commitment Towards Cybersecurity in Africa: A case of Namibia   Teofelus Tonateni Tuyeni
13:10 – 13:20	How Institutional Factors in Government Agencies Affect Developing Countries in the Realisation of National Cybersecurity Capacity Building Outcomes: A Case of Malawi   Chimwemwe Queen Mtegha
13:20 – 13:30	Evolving a framework to observe and analyse customer experience on the Twitter Platform using Machine Learning Techniques.   Thaneshni Moodley
13:30 – 14:20	Lunch
14:30 – 15:30	NLP and sentiment analysis   Prof Thakur and Yassen Khan
15:30 – 16:30	Hands-on workshop – Statistical Analysis   Dr Lateef Amusa and Ms Sibukele Gumbo
17:00 – 19:00	Opening Cocktail (African Sky, 11th floor)

Time	Programme Directors: Prof Colin Thakur and Prof Hossana Twinomurinzi
09:00 – 09:05	Welcome DUT DVC
09:05 – 09:10	Welcome NEMISA Board Chair
09:10 – 09:25	Minister keynote
09:25 – 09:30	Day overview

**Track: Artificial Intelligence & Data Science | Chair: Prof Colin Thakur**

09:30 – 09:50	The issues, challenges and impacts of implementing machine learning in the financial services sector: An outcome of a systematic literature review   Siphwe Mndebele and Thembekile Mayayise
09:50 – 10:10	Evaluating the Impact of Organisational Resources and Big Data Analytics on Business Performance of South African E-Commerce SMMEs: A Systematic Literature Review   Marungwane Leshego Mogale
10:10 – 10:30	Tea break
10:30 – 10:50	Instructor's Competence Perceptions on Teaching Data Science: A PCK Framework   Nkosikhona Msweli, Tendani Mawela and Hossana Twinomurinzi
10:50 – 11:10	Keynote: Dr Mark Nasila

**Track: Digital government | Chair: Prof Tendani Mawela**

11:10 – 11:30	Understanding Digital Economy Dilemmas   Nixon Muganda Ochara
11:30 – 11:50	Negotiating Mobile Phone Usage for MHealth by Maternal Healthcare Clients Who Do Not Own Mobile Phones in rural Malawi   Priscilla Maliwichi, Wallace Chigona, Address Malata and Karen Sowon

**Track: Online learning | Chair: Dr Samwel Mwapwele**

11:50 – 12:10	Exploring critical factors for effective digital skills delivery towards meaningful outcomes in an online-first South African context   Dr. Natasha Katunga, Dr. Carlynn Pokpas, Dr. Leona Craffert
12:10 – 12:30	A framework for South African university students' online learning: Social presence, digital skills, and competencies   Ntombizethu Lubisis and Samwel Mwapwele
12:30 – 13:00	Towards improving learning experiences in self-paced online learning courses   Sibukele Gumbo and Hossana Twinomurinzi
13:00 – 14:00	Lunch

**Track: Datathon solutions : Mr Joseph Ndaba**

14:00 – 14:30	Datathon Background and Introduction of judges
14:30 – 15:00	Technology to track job opportunities   Hacker solution 1: Elite Vine
15:00 – 15:30	E-Village - Smart Village Data Processors Multi-Actor Platforms (MAPs)   Hacker solution 2: The Cortex
15:30 – 16:00	Falsify - An AI-driven chatbot   Hacker solution 3: A-team
16:00 – 16:30	Techgro for marine life   Hacker solution 4: TechGro
16:30 – 17:00	POE Intergrated Learning System   Hacker solution 5: FutureDX

**Gala dinner (African Sky, 11th floor)**

19:00 – 19:05	Opening and Welcome (Starters served)   Prof H Twinomurinzi
19:05 – 19:15	NEMISA PAAC Chair   Ms T Buswana
19:15 – 19:40	Keynote   Ms Cherly Benadie
19:40 – 19:50	Best Paper Awards   Prof T Mawela and Prof C Thakur
19:50 – 20:00	Hackathon winner announcement   Ms M Leshabane and Mr T Rammitlwa
20:00 – 21:00	Dinner is served

Time	Programme Directors: Prof Colin Thakur and Prof Hossana Twinomurinzi
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**Track: Online learning | Chair: Dr Samwel Mwapwele**

09:00 – 09:20	Factors Contributing to Cybersecurity Education and Skills: A Systematic Literature Review   Prince Zaqueu and Tendani Mawela
09:20 – 09:40	Factors Affecting how University Students Comply with Cybersecurity Measures: A Case of South Africa   Papama Mtambeka, Chimwemwe Queen Mtegha, Wallace Chigona and Teofelus Tonateni Tuyeni
09:40– 10:00	ICT SMMES in South African Communities: Current Impact and Future Advancement through 4IR   Annelie Jordaan
10:00 – 10:30	Digital Skills Framework   Prof L Craffert (Round Table)

**Track: Social Media | Chair: Dr Thembi Mayayise**

10:30 – 10:50	Sentiment Analysis of South African tweets about COVID-19 vaccines   Thato Ditsele, Wallace Chigona and Malebo Sephodi
10:50 – 11:10	Habits for lifewide learning- A literature review on the role of AI and dark patterns on addictive online behaviour   Naomi Isabirye
11:10 – 11:30	Tea break



**Track: Open Innovation| Chair: Prof Nixon Ochara**

11:30 – 12:00	mobileDNA application used to explore location information   Julia Keddie, Renette Blignaut, Fallo Kanye, Lieven De Marez and Simon Perneel
12:00 – 12:30	Future of Work in Broadcasting   Naomi Isabirye, Trevor Rammitlwa, and Hossana Twinomurinzi
12:30 – 13:00	TBC   TBC
13:00 – 13:10	Closing Remarks   NEMISA CEO: Trevor Rammitlwa
13:10 – 14:00	Lunch