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NEXTCOMP 2024

4th International Conference on

NEXT GENERATION
COMPUTING
APPLICATIONS

24 - 26 OCTOBER 2024

CONFERENCE PROGRAMME

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HUAWEI

	DAY 1-Thursday 24 October 2024
8.30 AM-9.30 AM	**Registration**
9.30 AM-10.05 AM	**Opening Ceremony** **Welcome Address by General Chair, Assoc. Prof. (Dr.) (Mrs.) Maleika Heenaye-Mamode Khan, FoICDT, University of Mauritius (09:35am - 09:40am)** **Address by Vice-Chancellor, Professor Sanjeev Kumar SOBHEE, University of Mauritius (09:40am - 9:50am)** **Video Presentation of the Faculty of ICDT and Previous Editions of NextComp (09:50-09:55)** **Address by Mr Vidia Mooneegan, Global Head Shared Services at Dayforce (09:55-10:05)** **(Venue: Maritim Hall)**
10:05 AM -10:15 AM	**PHOTO SESSION (Venue: Maritim Hall)**
10:15 AM -10:45 AM	**TEA BREAK (Venue: Terrace)**
10.45 AM-11.15 AM	**Keynote Address-1 by Prof. El-Baz : "Role of AI and Big Data in Personalized Diagnosis of Human Diseases and Disorders"** **(Venue: Maritim Hall)**

	DAY 1-SESSION 1	
	Track 1: Intelligent Systems and Applications **Session Chairs: Dr Sameerchand Pudauth and Dr(Mrs) Zahra Mungloo-Dilmohamud** **Venue: Maritim Hall**	**Track 3: Security and Communications Technologies** **Session Chairs: Dr Avinash Mungur and Dr (Mrs) Anuja Meetoo-Appavoo** **Venue: Balaclava Room**
11.15 AM-12.30 PM	P3 - Laurie Butgereit, Helper Zhou. Using GPT-4 to Tutor Python Programming in Shona and Ndebele in Zimbabwe	P11 - Ntshuxeko Makondo, Errol Baloyi, Hlabishi Kobo, Topside Mathonsi. A Review of PFCP Cyber Attacks in 5G SA for Robotic Telesurgery Services
	P5 - Dassen Sathan, Shakuntala Baichoo. Drug Target Interaction prediction using quantum machine learning	P17 - Parlan Obeegadoo, Girish Bekaroo. Effective Detection of Fileless Malware: A Review and Comparative Analysis of Detection Techniques
	P14 - Kousraj Ujoodha, Baby Gobin Rahimbux, Nuzhah Gooda Sahib. Training Tacotron 2 for Text-to-Speech Synthesis in Kreole Language: Methodology and Audio Processing	P27 - Amar Seeam, Visham Ramsurrun. Securing V2X-Enabled Unmanned Vehicles: A Comprehensive Taxonomy of Cyber Threats and Countermeasures
	P18 - Laurie Butgereit, Amar Kumar Seeam. Characteristics of an AI Tutor to Prepare Students in Technical Subjects for the new Society 5.0	P30 - Bhavesh Hulloowan, Girish Bekaroo. Defending Against XML External Entity (XXE) Attacks: A Review and Comparative Analysis of Prevention Mechanisms
	P23 - Rakshita Ramdharee, Zahra Mungloo-Dilmohamud. YOLO-Based Techniques for the Crown-of- Thorns Starfish Detection: A Comparative Study	P31 - Yaachna Rawoteea, Girish Bekaroo. RXSS Protect: A Browser Extension for Detection of Reflected Cross-Site Scripting Attacks in Real-Time Using Machine Learning
12.30 PM-1.30 PM	**LUNCH (Venue: Belle Vue Main Restaurant)**	

DAY 1-SESSION 2	
Track: Industry session **Session Chairs: Dr. Oomesh Gukhool and Dr Roushdat Elaheebocus** **Venue: Maritim Hall**	**Track 2: ICT4D** **Session Chairs Mrs Sudha Cheerkoot-Jalim and Mrs Zarine Cadersaib** **Venue: Balaclava Room**
Dayforce - Joshua Gbogodor - "Securing the Internet of Things (IoT): Protecting Smart Devices in a Connected World"	P4 - Johannes Schönböck, Josef Altmann, Werner Retschitzegger, Wieland Schwinger, Elisabeth Kapsammer, Birgit Pröll, Nikolas Goblirsch-Urban, Marianne Lechner and Christoph Angster. Engagement by Goals - A Digital Platform for Goal-Oriented Volunteering
	P13- Karabo Ntwaagae, Edwin Thuma and Gontlafetse Mosweunyane. Improving the Classification of Sentiments Towards Covid-19 Vaccines using Semantic Enrichment and Emojis
Mauritius Commercial Bank Ltd - Surajbali Bholanathsingh - "Unleashing Digital Transformation in Banking"	P20 - Hanshee Fowdar , Girish Bekaroo. Transformative Botanical Visualization: Exploring the Application of Augmented Reality to Visualize Flowers
	P35 - Rami Chahin, Ali Akyol, Jorge Marx Gómez. Weed Detection in Smart Agriculture Application in the 5G Smart Country Project
	P37 - Vidushi Lukhoo, Raj Kishen Moloo. A Carpooling System To Ease Traffic In Mauritius

1.30 PM-3.00 PM

3.00 PM-3.30 PM	**TEA BREAK (Venue: Terrace)**

DAY 1-SESSION 3	
Track: Industry session **Session Chairs: Dr. Oomesh Gukhool and Dr Roushdat Elaheebocus** **Venue: Maritim Hall**	**Doctoral Consortium** **Session Chair: Dr. (Mrs.) Baby Gobin-Rahimbux** **Venue: Balaclava Room**
Infosys Ltd - John Yeung Tack Yan - "Infosys Zero Disruption Modernization"	Muhammad Muzzammil Auzine. From CNNs to Transformers: Enhancing Colorectal Cancer Diagnosis with Attention Mecanism.
	Mohammad Shoaib Ibne Saleem Casseem. Age-Invariant Face Recognition using Mamdani Fuzzy Logic: Threshold-Based Evaluation Across Age Categories.
	Khadiime Jhumka. Explainable Deep Learning Techniques for Accurate Kidney Disease Classification.
State Bank of Mauritius Ltd - Dharmeshsingh Mohadewo - "The Power of Artificial Intelligence in all stages of trading process"	Nirmal Kumar Rampersand. Enhance Liner Shipping Network Design usint Ant Colony Optimisation.
	Preeti Bissoonauth-Daiboo. Hybrid Transformer-CNN Model for Enhanced Artefact Detection and Classification.
	Ujoodha Kousraj. Training Tacotron 2 for Text-to-Speech Synthesis in Kreole Language: Methodology and Audio Processing.

3.30 PM-5.00 PM

	DAY 2 - Friday 25 October 2024
8.30 AM - 9.30 AM	**Registration**
9.30 PM- 10.00 PM	**Keynote Address-2 by Prof. Karlis : "Artificial Intelligence and Sports Analytics" (Venue: Maritim Hall)**
10.00 AM- 10.30 AM	**TEA BREAK (Venue: Terrace)**

	DAY 2 - SESSION 1	
	Track 1: Intelligent Systems and Applications/Track 4: FinTech Session Chairs: Dr Bhavish Jugurnath and Dr (Mrs) Maleika Heenaye-Mamode Khan Venue: Maritim Hall	**Doctoral Consortium Session Chair: Dr. (Mrs.) Baby Gobin-Rahimbux Venue: Balaclava Room**
10.30 AM- 12.30 PM	P6 - Innocent Chilomo and Bennett Kankuzi. Leveraging ML to Detect Fraudulent Customs Declaration: A Case of Logistic Regression and LightGBM	Azina Nazurally. Data augmentation through GAN: a case study on a novel dataset
	P9 - Junaid Bin Asad Edoo and Roopesh Kevin Sungkur. Mauvote: A Novel Mobile Electronic Voting System Using Blockchain	Buhora Zakiya. The role of digital technology as a support for climatic and cyclone risks in the seafood sector in the South-West Indian Ocean SWOI: a comparative study
	P21 - Mufaro Shoniwa, Karel Veerabudren, Mrinal Sharma. AI-based Malware Threat Prediction through CNN-SVM Ensemble	Finze Nikola. Generative AI in Higher Education
	P29 - Isaac Munthali, Bennett Kankuzi. Using Game Theory to Prioritize Goals in Requirements Engineering	Yarroo Bibi Faatimah Shagufta. An automatic speech transcriber for Kreol Morisien
	P33 - Ryan Cassy, Girish Bekaroo. Smart Fish Feeding in IoT-based Aquarium: A Comprehensive Approach Integrating Computer Vision, Machine Learning and Sensor Technology	Ramsurrun Hemraj. Digital Tools for Informal Science Education and their Impact on Students' Scientific Literacy
		Muntasirah Abdul Raman. Application of massively parallel processing architecture to solve physical problems in relativistic astrophysics and numerical climate modelling.
12.30 PM - 1.30 PM	**LUNCH (Venue: Belle Vue Main Restaurant)**	
1.30 PM - 2.00 PM	**Networking Session**	

	DAY 2 - SESSION 2
	Track 1: Intelligent Systems and Applications **Session Chairs: Dr Sameerchand Pudaruth and Dr Paramasiven Appavoo** **(Venue: Maritim Hall)**
2.00 PM - 2:30 PM	P39 - Shehzad Jaunbuccus, Roushdat Elaheebocus. Promoting Physical Activity and Social Engagement in Older Adults through Immersive Exergaming: A Comprehensive Review
	P41 - Nirmal Kumar Rampersand, Oomesh Gukhool. Enhanced Liner Shipping Network Design using Ant Colony Optimisation
2.30 PM - 3.00 PM	**Talk on Blockchain by Mr Raghu Mishra** **(Venue: Maritim Hall)**
3:00 PM - 3:30 PM	**Closing Ceremony** **Blockchain Workshop Award Ceremony** **(Venue: Maritim Hall)**
3:30 PM - 4:00 PM	**TEA BREAK (Venue: Terrace)**