

2nd International Conference on
Next Generation Computing Applications 2019

NEXTCOMP 2019

Faculty of Information, Communication and Digital Technologies

19th – 21st September, Mauritius



Conference Programme

Sponsors



DAY 1 - Thursday 19 September 2019		
8.30 AM- 9.30 AM	Registration (Venue: Masterclass)	
9.30 AM- 10.15 AM	<p style="text-align: center;">Opening Ceremony</p> <ul style="list-style-type: none"> • Welcome Address by <i>General Chair</i> (09:35am - 9:45am) • Address by <i>Vice-Chancellor</i>, University of Mauritius (09:45am - 9:55am) • Address by Minister of Education and Human Resources, Tertiary Education and Scientific Research, <i>Honourable Mrs Leela Devi DOOKUN-LUCHOOMUN</i> (09:55am - 10:05am) • Inaugural address by Minister of Technology, Communication and Innovation, <i>Honourable Yogida SAWMYNADEN</i> (10:05am - 10:15am) <p style="text-align: center;">(Venue: Masterclass)</p>	
10.15 AM- 10.30 AM	TEA BREAK (Venue: Hotel Lobby)	
10.30 AM- 11.30AM	Keynote Address-1 by Prof Wolfgang Heiden: "Crossroads - Where do we want to go tomorrow?" (Venue: Masterclass)	
SESSION 1		
11.30 AM- 12.45 PM	<p>Track 3 - Security and Communications Technologies Session Chair: Dr. Avinash Mungur Venue: Thinktank2</p>	<p>Track 2 - ICT4D Session Chair: Dr. Nuzhah Gooda Sahib Venue: Masterclass</p>
	P1 - Laurie Butgereit. A Natural Migration From Scrum to Kanban as a Software Artifact Matures: A Case Study	P7 - Gwamaka Mwalemba. Confronting Challenges Facing Enterprise Systems Education in Africa
	P5 - Mussawir Hosany and Girvana Ramanna. A new Unequal Error Protection scheme for Coded MIMO systems using Hierarchical 4/M QAM modulation	P8 - Anass Bayaga and Jacques Ophoff. Determinants of E-Government Use in Developing Countries: The Influence of Privacy and Security Concerns
	P18 - Gheorghe Florin Hajmasan, Alexandra Mondoc and Octavian Creț. Bytecode Heuristic Signatures for Detecting Malware Behavior	P21 - Oarabile Sebuli, Irina Zlotnikova and Hlomani Hlomani. A Lightweight Version of National Performance Indicator Ontology (NPIonto)
	P20 - Amar Seem, Ochanya Ogbah, Xavier Bellekens and Shivanand Guness. Threat Modeling and Security Issues for the Internet of Things	P15 - Ulrich Schmitt. Interoperability of Managing Knowledge and Learning Processes for Sustainable e-Education
	P22 - Khangwelo Muronga, Adéle Da Veiga, Marlien Herselman and Adele Botha. An Analysis of Assessment Approaches and Maturity Scales used for Evaluation of Information Security and Cybersecurity User Awareness and Training Programs: A Scoping Review	P39 - Poorvasee Munogee, Hema Moctaram and Zarine Cadarsaib. Using a Gamification Approach to teach ERP in Higher Education
12.45 PM- 1.45 PM	LUNCH (Venue: Hotel Restaurant)	

DAY 1 - Thursday 19 September 2019

SESSION 2

DAY 1 - Thursday 19 September 2019		SESSION 2	
	<p>Track 1 - Intelligent Systems and Applications Session Chair: Mrs. Sudha Cheerkoot-Jalim Venue: Thinktank2</p>	<p>Track 2 - ICT4D Session Chair: Dr. Nitish Chooramun Venue: Masterclass</p>	
	P2 - Laurie Butgereit. Using Neural Networks to Assist in Scheduling Automated Testing in an Agile Environment	P24 - Aditya Santokhee, Girish Bekaroo and Divesh Roopowa. Hazard Perception Training and Assessment of Young Drivers in Mauritius: Investigating the Acceptance of the MauHazard Tool	
	P19 - Yatindra Kumar Ramgolam, Heman Shamachurn and Jonathan Yannick Coret. Energy Autonomous and Smart Outdoor PV Module Characterisation Facility	P31 - Lakshmi Sujeeun, Shakuntala Baichoo, Zahra Mungloo-Dilmohamud and Yasmina Jaufeerally-Fakim. Detection of Genome Sequence Outliers Across Pan-Genomes	
	P23 - Kingsley Igbokwe, Shivanand Guness, Praveer Towakel and Amar Seeam. Challenges Ahead in Cyber Physical Systems: A Coding Survey	P52 - Vijayprakash Chandreekant Ahku and Shireen Panchoo. Implementing personalised learning for mixed ability students for computer programming in a learning environment	
1.45 PM-3.30 PM	P56- Aatish Chiniah, Ayaz Chummun and Zaid Burkutally. Categorising AWS Common Crawl Dataset using MapReduce	P27 - Girish Bekaroo, Divesh Roopowa and Chandradeo Bokhoree. Mobile-Based Carbon Footprint Calculation: Insights from a Usability Study	
	P36 - Okoronkwo Chinomso Daniel, Usman Abdul Gimba, Visham Ramsurrun and Amar Seeam. Smart Library Seat, Occupant and Occupancy Information System, using Pressure and RFID Sensors	P30 - Amaan Nathoo, Tanveer Gangabissoon and Girish Bekaroo. Exploring the Use of Tangible User Interfaces for Teaching Basic Java Programming Concepts: A Usability Study	
	P40 - Jannish Purmaissur, Amar Seeam, Xavier Bellekens and Shivanand Guness. Augmented Reality Intelligent Lighting Smart Spaces	P32- Véronique Sebastien, Didier Sebastien, Ilias Timol, Dominique Gay, Alain Cucchi and Christophe Porlier. Moodleboard : dynamic and interactive indicators for teachers and pedagogical engineers	
	P43 - Bibi Raissah Oderuth, Kosheta Ramkissoon and Roopesh Kevin Sungkur. SMART Campus Library System	P35 - Gloria Egehiohen Iyawa, Marlien Herselman and Adele Botha. Building a Digital Health Innovation Ecosystem Framework through Design Science Research	
3.30 PM-4.00PM	<p>TEA BREAK (Venue: Hotel Lobby)</p>		

DAY 2 - Friday 20 September 2019		
8.30 AM-9.30 AM	Registration (Venue: Masterclass)	
9.30 AM-10.30 AM	Keynote Address-2 by Prof Heiko Gewald: "The Use of Digital Resources by the Aging Generation" (Venue: Masterclass)	
10.30 AM-10.45 AM	TEA BREAK (Venue: Hotel Lobby)	
SESSION 3		
10.45 AM-12.15 PM	Track 3 - Security and Communications Technologies Session Chair: Mr. Aatish Chiniah Venue: Thinktank2	Track 4- Industry Session Session Chair: Dr. Oomesh Gukhool Venue: Masterclass
	P28 - Jaco-Louis Kruger and Hein Venter. Requirements for IoT Forensics	Ceridian: Shiek Ahmad, Abhishek Jagdamb. Digital Innovation
	P37 - Christoph Lipps, Dennis Krummacker and Hans Dieter Schotten. Securing Industrial Wireless Networks: Enhancing SDN with PhySec - A Conceptual Approach	Infomil: Yashvin Nababsing, Krishen Padayatchy. Phygital Retail
	P46 - Morteza Sheikh, Jamshid Aghaei, Ahmad Nikoobakht, Gerardo J. Osório, Miadreza Shafie-Khah, Mohamed Lotfi and João P. S. Catalão. Computational Simulation Results in Power Systems Operation to Integrate Reliability in the Security Constrained Optimization Problem	State Bank Mauritius: Vashist Roy Hauradhun. Emerging Technologies – Robotics Process Automation
	P53 - Manikandan V M and Masilamani V. An Improved Reversible Data Hiding Scheme through Novel Encryption	
	P29 - Bhargava Sokappadu, Avishek Hardin, Avinash Mungur and Sheeba Armoogum. Software Defined Networks: Issues and Challenges	
	P59 - Purvashi Baynath, K.M.Sunjiv Soyjaudah and Maleika Heenaye-Mamode Khan. Pattern representation using Neuroevolution of the augmenting topology (NEAT) on Keystroke dynamics features in Biometrics	
12.15 PM-1.30 PM	LUNCH (Venue: Hotel Restaurant)	

DAY 2 - Friday 20 September 2019		
SESSION 4		
	Track 1 - Intelligent Systems and Applications Session Chair: Dr Baby Gobin-Rahimbux Venue: Thinktank2	Track 2 - ICT4D Session Chair: Mr. Raj Moloo Venue: Masterclass
1.30 PM- 3.30 PM	P54 - Sofia Meacham, Detlef Nauck and Han Zhao. Framework for personalised online education based on learning analytics through the use of domain-specific modelling and data analytics	P42 - Fahad Ahmed Satti, Jamil Hussain, Hafiz Syed Muhammad Bilal, Ju Eun Yeon, Wajahat Ali Khan, Asad Masood Khattak and Sungyoung Lee. Holistic User eXperience in Mobile Augmented Reality using User eXperience Measurement Index.
	P66 - Roysing Barosa, Sayed Issamuddin Sayed Hassen and Leckraj Nagowah. Smart Aquaponics with Disease Detection	P55 - Aatish Chiniah and Yatindra Kumar Ramgolam. Innovative Architecture for Dynamic Solar Data Acquisition and Processing: A Case for Mauritius and Outer Islands
	P47 - Edwin Thuma, Nkwebi Peace Motlogelwa, Tebo Leburu-Dingalo and Monkogoi Mudongo. Query Reduction for an Effective Japanese Statute Law Retrieval	P26 -Dwijesh Gajadur and Girish Bekaroo. TangiNet: A Tangible User Interface System for Teaching the Properties of Network Cables
	P63 - Mohammad Chuttur, Priyanca Jogoo and Bibi Ishrat Shagoofah Golamgous. From Desktop to Mobile View: A Simplified Approach to Mobile Website Development	P57- Mohammad Anass Korimbocus, Thaveer Singh Towokul and Soulakshmee D. Nagowah. Scrum Meeting Tool for Knowledge Capture and Sharing
	P64 - Pankaj Joshi, Sachin Kumar, Divya Kumar and Anil K. Singh. A Blockchain Based Framework for Fraud Detection	P58- Tirathraj Ramburn, Deevash Badoreea and Sudha Cheerkoot-Jalim. DriveMU: A Real-time Road-Traffic Monitoring Android Application for Mauritius
	P48 - Henry Muchiri, Ismail Ateya and Gregory Wanyembi. Determining the Location of a Concealed Handgun on the Human Body using Marker-Less Gait Analysis and Machine Learning	P65 - Vidharsh Chuckun, Ganeshwaree Coonjan and Leckraj Nagowah. Enabling the Disabled using mHealth
	P60 - Purvashi Baynath, K.M.Sunjiv Soyjaudah and Maleika Heenaye- Mamode Khan. Machine Learning Algorithm on Keystroke dynamics Fused pattern in biometrics	P61 - Mohammad Chuttur, Humairaa Furreedun, Amreen Amreen. A Crowdsourced Mobile App Architecture for Plotting User Rated Free WiFi Hotspots
	P12- Domen Mongus and Simon Juric. Generation of traversability maps based on 3D point-clouds	P38 - Mohammad Umeir Mayaram, Amrik Dussoye and Zarine Cadessaib. ERP Acceptance Model for SMEs based on CSFs
	3.30 PM- 4.00 PM	TEA BREAK (Venue: Hotel Lobby)

DAY 3 - Saturday 21 September 2019		
Networking		

Organising Committee

Honorary Chair: Dr. Sunilduth Baichoo, Dean, Faculty of Information, Communication and Digital Technologies, University of Mauritius

Conference Chair: Dr. (Mrs) Maleika Heenaye-Mamode Khan, University of Mauritius

Co-Chair: Dr. Kavi Kumar Khedo, University of Mauritius

Technical Programme Committee

Chair: Dr. Yasser Chuttur, University of Mauritius

Co-Chair: Dr. Oomesh Gukhool, University of Mauritius

TPC Members

Dr. Abdul-Rahman Al-Ali, American University of Sharjah

Mr. Amreesh Phokeer, African Network Information Centre

Assoc. Prof. Angelos Marnerides, Lancaster University

Prof. Carlos Andrés Peña-Reyes, University of Applied Sciences and Arts Western Switzerland

Dr. Emanuel Grant, University of North Dakota

Prof. Florence Sedes, Institut de Recherche en Informatique de Toulouse

Dr. Lisa Seymour, University of Cape Town

Dr. Michael Mensah, University of Scranton

Dr. Musab Isah, African Network Information Centre

Prof. Nai Wei Lo, National Taiwan Univ. of Science and Technology

Dr. Nigel Gwee, Louisiana State University

Prof. Prabhakar T.V, Indian Institute of Technology Kanpur

Dr. Sodha Janak, The University of the West Indies

Track Chairs

Intelligent Systems and Applications: Dr. Baby Ashwin Gobin-Rahimbux and Dr Nitish Chooramun, University of Mauritius

ICT4D: Nuzhah Gooda Sahib-Kaudeer, University of Mauritius

Security and Communication Technologies: Dr. Avinash Mungur, University of Mauritius

Conference Secretariat

Dr. Anisah Ghoorah, University of Mauritius

Dr. Shakuntala Baichoo, University of Mauritius

Mrs. Zahra Mungloo-Dilmohamud, University of Mauritius

Mr. Aatish Chiniyah, University of Mauritius

Finance

Dr. Baby Ashwin Gobin-Rahimbux, University of Mauritius

Dr. Nitish Chooramun, University of Mauritius

Dr. Nuzhah Gooda Sahib-Kaudeer, University of Mauritius

Dr. Avinash Mungur, University of Mauritius

Local Arrangement

Mr. Raj Moloo, University of Mauritius

Mr. Sameerchand Pudaruth, University of Mauritius

Mrs Sheeba Armoogum, University of Mauritius

Mr. Kevin Sungkur, University of Mauritius

Mr. Somveer Kishnah, University of Mauritius

Publications

Dr. Anisah Ghoorah, University of Mauritius

Dr. Roushdath Elaheebocus, University of Mauritius

Mrs. Soukshmee Devi Nagowah, University of Mauritius

Mrs. Sudha Cheerkoot-Jalim, University of Mauritius

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