2019 Third World Conference on Smart Trends in Systems Security and Sustainability (WorldS4 2019)

London, United Kingdom
30 – 31 July 2019

Additional Copies of This Publication Are Available From:

WorldS4 2019 - TECHNICAL SESSION | DAY 1

30th July 2019 | Room No. TM3-03, Roding Building, London Metropolitan University, London, UK

Session WS4 - 1 **No. of Papers - 08** **02:00 PM – 04:00 PM** **Room : TM3-03** **Session Chair** **Priyanka Sharma**	**Investigating the Potential of A Smartphone Application for Tourists to Promote Sustainable Mobility** George Papageorgiou, Corinne Petrakis, Panayiotis Georgiades, Natasa Ioannou (EUC Research Centre) *Country – Cyprus*	1
	Formulation of the Task of Constructing an Expert System for the Diagnosis of Leukemia Ruslan T. Gabdrahmanov, Rustam A. Burnashev, Arslan I.Enikeev (Institute of Computational Mathematics and Information Technology Kazan Federal University), Abdullah H. Hussein (Imam Al-Kadhum University College) *Country – Russia, Iraq*	7
	IoT Devices Recognition through Object Detection and Classification Techniques Argyro Mavrogiorgou, Athanasios Kiourtis, Dimosthenis Kyriazis (University of Piraeus) *Country – Greece*	12
	Proposal of a Model to Apply Hyperledger in Digital Identity Solutions in a Public Organization of Ecuador Segundo Moisés Toapanta Toapanta, Felix Gustavo Mendoza Quimi Máximo Geovani Tandazo Espinoza (Universidad Politécnica Salesiana), Luis Enrique Mafla Gallegos (Escuela Politécnica Nacional) *Country – Ecuador*	21
	Strategic analysis of the long-term future needs of educational services Alexander Raikov (Russian Academy of Sciences) *Country – Russia*	29
	Video lectures intellectual analysis algorithms and software system development Marina Bolsunovskaya, Vladimir Zhvarikov, Yakov Somov, Kirill Beliaevskii, Nikolay Abramov, Aleksei Gintciak (Peter the Great St. Petersburg Polytechnic University) *Country – Russia*	37
	Heterogeneous knowledge for sustainable planning: Notes from ontology-based experimentations Maria Rosaria Stufano Melone, Domenico Camarda, Dino Borri(DICATECh Polytechnic University of Bari, Bari), Stefano Borgo(ISTC CNR Trento) *Country - Italy*	43

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Session WS4 - 1 No. of Papers - 08 02:00 PM – 04:00 PM Room : TM3-03 **Session Chair** *Priyanka Sharma*	**Perception of Smart Campus Big Data Analytics in University** Abdulazeez Abdulazeez Osuwa, Abdulhafis Abdulazeez Osuwa (Cyprus International University), Jesse Oluwafemi Katende (Covenant University) *Country – Cyprus, Nigeria*	48
	Towards Self-Aware Heatstroke Early-Warning System Based on Healthcare IoT Vivekanand Karmani, Aftab Ahmed Chandio, Priyanka Karmani, Moiz Chandio, Imtiaz Ali Korejo (University of Sindh, Charles Sturt University) *Country – Pakistan, Australia*	59
Session WS4 - 2 No. of Papers - 06 04:00 PM – 05:30 PM Room : TM3-03 **Session Chair** *Meka James Stephen*	**An introduction for the indoor localization systems and the position estimation algorithms** Zhuoqi Zeng (Bosch (China) Investment Ltd.), Lei Wang (TongJi University), Steven Liu (University of Kaiserslautern) *Country – China, Germany*	64
	Verification of a Smart Power Control System using Hybrid Actors Libero Nigro, Paolo F. Sciammarella (University of Calabria, DIMES) *Country – Italy*	70
	Safeguarding Data Integrity by Cluster-Based Data Validation Network Kevin Wallis, Christoph Reichz, Christian Schindelhauerx (University of Applied Sciences Furtwangen), Fabian Schillingery (University of Freiburg) *Country – Germany*	78
	Prototype of a Security Model to Mitigate Risks in the Management of Electronic Money in Ecuador Segundo Moisés Toapanta Toapanta, Alejandro Alfredo Sotomayor Balladares, Dario Fernando Huilcapi Subia (Universidad Politécnica Salesiana (UPS), Luis Enrique Mafla Gallegos (Escuela Politécnica Naciona (EPN)) *Country – Ecuador*	87

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Session WS4 - 2 **No. of Papers - 06** **04:00 PM – 05:30 PM** **Room : TM3-03** **Session Chair** *Meka James Stephen*	**Ontology based method of data codification for information exchange** Yuri Lipuntsov (Lomonosov Moscow State University) *Country – Russia*	94
	Clustering based Cloud Radio Access Networks for 5G Smart Systems Changsung Lee, Wonsuk Yoo, Younghwan Shin, Jong-Moon Chung (Yonsei University) *Country – South Korea*	101

Working Tea / Coffee with Cookies [04:00 PM – 05:30 PM]

CLOSING REMARKS FOR DAY 1 (05:30 PM - 05:35 PM)
By : Mihir Chauhan, Organising Secretary, WorldS4 2019

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TIME	DETAILS	
REGISTRATION [09:00 AM – 09:30 AM] with Networking Tea / Coffee with cookies		
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	Detection of the LOS/NLOS state change based on the CIR features Zhuoqi Zeng, Wanlin Yang, Wei Wang (Bosch (China) Investment Ltd.), Lei Wang (TongJi University) Steven Liu (University of Kaiserslautern) *Country – China, Germany*	110
	Definition of a Security Prototype for IoT Applied to Higher Education Segundo Moisés Toapanta Toapanta, Raúl Segundo Tingo Soledispa, Joffre Marcelo Valverde López (Universidad Politécnica Salesiana (UPS), Luis Enrique Mafla Gallegos (Escuela Politécnica Nacional (EPN) *Country – Ecuador*	115
	Management System of Integration of Informatization and Industrialization : GB/T 23000 Serial Chinese National Standards Qing Li, Chao Yu, Hailong Wei, Zhiyong Xu, Yudi Pu (Tsinghua University) Jun Li, Jian Zhou (Ministry of Industry and Information Technology of China) *Country – China*	121

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	Effective Data Structure for Smart Big Data Systems Applying an Expectation-Maximization Algorithm Younghwan Shin, Changsung Lee, Yunyeong Goh, Jong-Moon Chung (Yonsei University) Country – South Korea	136
	Smart Neuropathy Detection using Machine Intelligence: Filling the Void Between Clinical Practice and Early Diagnosis Tooba Salahuddin, Sumaya Ali Al-Maadeed, Uvais Qidwai (Qatar University), Saadat Kamran Ilyas, Ioannis N. Petropoulos, Rayaz A. Malik (Weill Cornell Medicine-Qatar) Country – Qatar	141
	Prototype of a Security Model Applied to IoT with Big Data for Tourist Management in the Cities of Ecuador Segundo Moisés Toapanta Toapanta, Hugo Xavier Hernández Romero, Nelson Salomón Mora Saltos (Universidad Politécnica Salesiana del Ecuador (UPS), Luis Enrique Mafla Gallegos (Escuela Politécnica Nacional (EPN) Country – Ecuador	147
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	Biometric Recognition Systems Based on SV Mpca and SV Mpca,lda Techniques Inas Al-Taie, Nassr Azeez(University of Essex, University of Baghdad), Wafa Yahya(University of Al-Hamdaniya), Arwa Basbrain(University of Essex, University of King Abdul-Aziz), and Adrian Clark(University of Essex) County - UK, Iraq, KSA	158

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Session WS4 - 4 **No. of Papers - 08** **11:45 AM – 01:45 PM** **Room : TM3-03** **Session Chair** *Libero Nigro*	**IoT-Based Fire Alarm System** Asthma Mahgoub, Nourhan Tarrad, Rana Elsherif, Abdulla Al-Ali, Loay Ismail (Qatar University) *Country – Qatar*	162
	Machine vision object measurement in difficult industry environment Matous Cejnek, Cyril Oswald (Czech Technical University) *Country – Czechia*	167
	A Sophisticated Secured Smart Metering System Mohamed Hassan Abdel Hamied, Essam M. Ramzy Hamed (College of Computing and Information Technology (CCIT)) Ayman M. Bahaa-Eldin (Misr International University) *Country – Egypt*	171
	Prototype of a Security Model for the Armed Forces of Ecuador Segundo Moisés Toapanta Toapanta (Universidad Politécnica Salesiana Ecuador), José Antonio Orízaga Trejo (Universidad de Guadalajara), Joseph Alexander Guamán Seis (Comando Conjunto de las Fuerzas Armadas Armada del Ecuador), Luis Enrique Mafla Gallegos (Escuela Politécnica Nacional Ecuador) *Country – Ecuador, Mexico*	179
	Towards Interdisciplinary Research: A Bibliometric View of Information Communication Technology for Development in Different Disciplines Mehwish Kayani (University of Punjab), Saeed-Ul Hassan (Information Technology University (ITU) Darren Dancey, Leo Liu, Raheel Nawaz, (Manchester Metropolitan University), Naif Radi Aljohani (King Abdulaziz University) *Country – Pakistan, Saudi Arabia, United Kingdom*	185

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	Image Segmentation of Meliponine Bee using Faster R-CNN Wan-Noorshahida Mohd-Isa, Afif Nizam, Aziah Ali (Multimedia University) *Country – Malaysia*	235
	Dynamic fog computing platform for event-driven deployment and orchestration of distributed Internet of Things applications Richard Nicholson, Timothy Ward, Derek Baum (Paremus Ltd), Xu Tao, Davide Conzon, Enrico Ferrera (LINK Foundation) *Country – Italy*	239
Session WS4 - 6 No. of Papers - 06 04:00 PM – 05:30 PM Room : TM3-03 Session Chair Amit Joshi	**Development perspective of a Moroccan smart city** Zineb BOUDANGA, Siham BENHADOU, Hicham Medromi (National and high school of electricity and mechanic (ENSEM) HASSAN II University), Jean-Philippe LEROY (Groupe IGS) *Country – Morocco, France*	247
	Smart Ambulance System for Highlighting Emergency-Routes AbdelGhani Karkar (Qatar University) *Country – Qatar*	255
	An Integrated Framework for Autonomous Driving: Object Detection, Lane Detection, and Free Space Detection Narsimlu Kemsaram, Gijs Dubbelman, Anweshan Das (Eindhoven University of Technology (TU/e)) *Country – Netherlands*	260
	Enhancing the performance of average throughput, end-to-end delay, drop packets and packet delivery ratio by using improved AODV (AODV+) routing protocol in ad-hoc wireless networks Dr. S. K. Srivastava(Pillai College of Engineering, Mumbai), Mrs. R. D.Raut(S.G.B.University, Amravati (M.S.)) *Country - India*	266

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Session WS4 - 7 No. of Papers - 09 02:30 PM – 04:00 PM **Session Chair** **Milan Tuba**	**Twitter Mining for Sentiment Analysis in Tourism Industry** Gunjan Gupta (A2G Enterprises Pvt. Ltd.), Parul Gupta (Infosys Technologies LTD.) *Country – India*	302
	Distributed and automated machine learning in big data stream analytics Oraib H. Alsahlee, Abdallah Al-Zu'bi, Ibrahim I. Alamro (Princess Sumaya university for technology) Dr. Jaber Alwidian (INFRASOFT Middle East /Big Data Department) *Country – Jordan*	307
	The Smolensk Catastrophe in the Light of Physics Lows Józef Pawelec (The M. Sklodowska-Curie Warsaw University) *Country – Poland*	314
	Predicting cyber attacks on industrial systems using the Kalman filter Lavrova Daria, Zegzhda Dmitry, Yarmak Anastasiia (Peter the Great St. Petersburg Polytechnich University) *Country – Russia*	317
	Evaluation of Rough set and Fuzzy rough set models with application to multi-attribute decision making Archana Dikshit-Ratnaparkhi, Dattatraya Bormane (AISSMSCOE), Rajesh Ghongade (BVCOE) *Country – India*	322
	A universal identification code for e-health services Ahmed BERBAR, Abdelkader BELKHIR (Computer Systems Laboratory USTHB) *Country – Algeria*	327

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Session WS4 - 8 **No. of Papers - 09** **04:00 PM – 05:30 PM** **Session Chair** **Milan Tuba**	**Research on Safe Distance Measuring Method of Front Vehicle in Foggy Environment** Rongbao Chen, Yuting Sheng, Sheng Wei, Dawei Tang (Hefei University of Technology) *Country – China*	333
	The Interlanguage Speech Intelligibility Benefit Disappears Under Noisy Conditions Haiyan Xiao, Nana Jin, Hongyan Wang, Jeroen van de Weijer (Shenzhen University) *Country –China*	339
	System of Diagnosis of Acute Nazhopharingitis Using Artificial Neural Networks Abdullah H. Hussein, Muayad H. Salman (Imam Al-Kadhum University College) Rustam A. Burnashev (Kazan Federal University) *Country – Iraq, Russia*	344
	New security descriptor computing algorithm of Supercomputers Andrey Molyakov (Russian state university for the Humanities) *Country – Russia*	349
	Effective Approach To Protect Images By Using Both Cryptography And Steganography Kommu Lavanya Kumari, Komal Teja Mattupalli (L&T Infotech) *Country – India*	351
	Secured Key Generation and Transmission, using Intel-SGX and Optical Communications Menachem Domb, Guy Leshem (Ashkelon Academic College) *Country – Israel*	357

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Session WS4 - 8 **No. of Papers - 09** **04:00 PM – 05:30 PM** **Session Chair** *Milan Tuba*	**IBMSDC: Intelligent Blockchain based Management System for protecting Digital Currencies Transactions** Omar Abdulkader, Vijey Thayananthan, Fathy Elbouraey (King Abdul-Aziz University), Alwi M. Bamhdi (Umm Al-Qura University) *Country – Saudi Arabia*	363
	3-D Path Planning Using Subatomic Particles and Feynman Diagrams Julio F. Acosta, Victor H. Andaluz, Mauricio X. Naranjo, José I. Molina, Alex Santana G., Germán Erazo, Alex O. Topa (Universidad de las Fuerzas Armadas ESPE) *Country –Ecuador*	368
	A Convolutional Neural Network Approach for Road Anomalies Detection in Bangladesh with Image Thresholding Taoseef Ishtiak, Sajid Ahmed, Mehreen Hossain Anila, Tanjila Farah (North South University) *Country – Bangladesh*	376
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CERTIFICATE DISTRIBUTION & CLOSING REMARKS FOR DAY 2 (05:30 PM - 05:40 PM) **By: Amit Joshi, Program Secretary, WS4 2019**		
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