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PROGRAMME

13TH INTERNATIONAL CONFERENCE
ON
DEVELOPMENTS in eSYSTEMS ENGINEERING

2020

WORLDWIDE
13TH-17TH DECEMBER






eSystems Engineering
Society





IEEE




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computer
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DAY 1 – MONDAY, 14TH DECEMBER 2020

CONFERENCE OPENING Welcome by the Conference Chairs		
KEYNOTE SPEAKER Prof. Laurence T. Yang St Francis University, Canada CYBER-PHYSICAL-SOCIAL SYSTEMS: DESIGN, ANALYTICS, SECURITY AND PRIVACY  https://ljamu.zoom.us/j/88661258978?pwd=SVBtWk1VVDkvQnJkYWxEOEhqK3Uxdz09		11:30am – 12:30pm UK Time
COFFEE BREAK MAKING COFFEE FOR YOURSELF		12:30pm – 12:40pm UK Time
SESSION A1 Advanced Robotics Session Chair – Professor Evgeni Magid Kazan Federal University, Russia  https://ljamu.zoom.us/j/89320767580?pwd=L3FYcGsxQnRzRzJVbHRMNFQ4SnBnUT09	SESSION A2 eSystem Engineering (Main Track) Session Chair – Prof Hissam Tawfik, Leedsbeckett University, UK.  https://ljamu.zoom.us/j/83213512344?pwd=Sm5vK1NnQkdXU0FQbVdCNG5MOXBrZz09	12:40pm – 2:10pm UK Time
<ul style="list-style-type: none"> • Influence of the Number of Channels When Highlighting Steady-State Visual Evoked Potentials Based on a Multivariate Synchronization Index • Medical Palpation Autonomous Robotic System Modeling and Simulation in ROS/Gazebo • Human-Following Cargo Robot TIAGo Base: The Study of User Interaction Features • Improving Model of Crawler Robot Servosila"Engineer" for Simulation in ROS/Gazebo • Standard-Complaint Gazebo Warehouse Modelling and Validation • Facilitating a Preparatory Stage of Real-World Experiments in a Humanoid Robot Assisted English Language Teaching Using Gazebo Simulator 	<ul style="list-style-type: none"> • Dynamic Neural Network-Based Feedback Linearization Control of a Pressurized Water Reactor • Verification of Airport Control Using Lisp Functional Language • Diagnosis of Induced Gear Wear in Two-Stage Helical Gearbox Based on Vibration Analysis • Modelling of the Exoskeleton Foot and Supporting Surface Interaction • Reviewing Educational Process at the Intelligent Robotics Masters Program via Surveys Among Graduate Students 	
COFFEE BREAK MAKING COFFEE FOR YOURSELF		2:10pm – 2:20pm UK Time




<p style="text-align: center;">SESSION B1 Logistics and Transport in the Industry 4.0</p> <p>Session Chair – Professor Irina Makarova, Naberezhnye Chelny Institute, Kazan Federal University, Russia.</p> <p>Session Co-Chair – Dr. Maria Drakaki, Alexander Technological Educational Institute of Thessaloniki, Greece.</p> <p> https://lomu.zoom.us/j/83217933723?pwd=S0RCRktLdzVwQTU0VHF0V2VPNEpzQT09</p>	<p style="text-align: center;">SESSION B2 Data analytics and Visualization</p> <p>Session Chair – Dr. Souad Larabi-Marie-Sainte, Prince Sultan University, Riyadh, KSA.</p> <p>Session Co-Chair - Dr. Sana Ghouzali, King Saud University, Riyadh, KSA</p> <p> https://lomu.zoom.us/j/84975491050?pwd=eEEzeE9nem0zWlVNT3VybFdXeHJDdz09</p>	<p>2:20pm – 3:30pm UK Time</p>
<ul style="list-style-type: none"> • Estimation of Traffic Accident Costs for Last-Mile Logistics in Kyiv • Vehicle Capacity Selection for Urban Freight Collecting and Distribution Operating • The Feedback Method to Improve Road Safety • The Development of a Charger for the Formula Student Electric Race Car • Features of Operation and Service of Vehicles Running on Generator Gas Obtained by Processing Domestic Waste 	<ul style="list-style-type: none"> • Visualization for Financial Support, Employment Status and Educational Level for People with Disabilities in Saudi Arabia • An Automatic Lung Cancer Detection and Classification (ALCDC) System Using Convolutional Neural Network • Inter - Intra Observers Variability Using Deep Learning and Traditional Image Processing for Breast Cancer • 3D GPR Models Generated from 2D Profiles Validation through Archaeological Excavation • Design and Implementation of Wireless Power Transfer for Wireless Heart Rate Monitoring System 	
<p>END OF FIRST DAY</p>		



DAY 2 – TUESDAY, 15TH DECEMBER 2020

<p>KEYNOTE SPEAKER</p> <p>Prof. Geyong Min University of Exeter, U.K.</p> <p>TOWARDS RELIABLE AND INTELLIGENT INTERNET-OF-EVERYTHING</p> <p> https://ljmu.zoom.us/j/83930598919?pwd=T2plc2RtbStqWXpzNjYyczZseTE0dz09</p>		<p>11:30am – 12:30pm UK Time</p>
<p>COFFEE BREAK MAKING COFFEE FOR YOURSELF</p>		<p>12:30pm – 12:40pm UK Time</p>
<p>SESSION C1 Logistics and Transport in the Industry 4.0</p> <p>Session Chair – Dr. Maria Drakaki, Alexander Technological Educational Institute of Thessaloniki, Greece. (drakaki@autom.teithe.gr)</p> <p>Session Co-Chair – Professor Irina Makarova, Naberezhnye Chelny Institute, Kazan Federal University, Russia. (IrVMakarova@kpfu.ru)</p> <p> https://ljmu.zoom.us/j/87227168841?pwd=OEpQOWpPaUQ1N2QrT1FicS84dWhcUT09</p>	<p>SESSION C2 Application of Mechatronics and Robotics Control Systems</p> <p>Session Chair –Dr. Khalaf S Gaeid, Tikrit University, Iraq. (gaeidkhalaf@gmail.com)</p> <p>Session Co-Chair - To be confirmed</p> <p> https://ljmu.zoom.us/j/86826819616?pwd=NIVBM2t3MGRjTzc0aE1EZGV0WkJ4UT09</p>	<p>12:40pm – 2:10pm UK Time</p>
<ul style="list-style-type: none"> • Comparison of Urban Conventional Delivery and Green Logistics Solutions • The RFID System for Accounting and Control of Truck Tires With Two-Step Identification: A Case Study • The Service Center Simulation Model as a Part of a Reverse Logistics System • Advanced Traveller Information Systems to Optimizing Freight Driver Route Selection • Fleet Size Problem for Secure Food Chain with a Certain Range of Transportation Temperature 	<ul style="list-style-type: none"> • Two- Link Robot Through Strong and Stable Adaptive Sliding Mode Controller • Design and Implementation of Submarine Robot with Video Monitoring for Body Detection Based on Microcontroller • Computer Based Control for Compensation of Power System Application • Robot Visual Navigation Using Ceiling Images • Preparing the Guide Robot to Operation • A Pipeline Framework for Robot Maze Navigation Using Computer Vision, Path Planning and Communication Protocols 	
<p>COFFEE BREAK MAKING COFFEE FOR YOURSELF</p>		<p>2:10pm – 2:20pm UK Time</p>


<p align="center">SESSION D1 eSystem Engineering (Main Track)</p> <p>Session Chair –Professor Dhiya Al-Jumeily, LJMU, UK (d.aljumeily@ljmu.ac.uk)</p> <p>Session Co-Chair - To be confirmed</p> <p> https://ljmu.zoom.us/j/89057886823?pwd=YW9QMnp2UldOdDJDTTBDclcyZkdz09</p>	<p align="center">SESSION D2 eSystem ENGINEERING (MAIN TRACK)</p> <p>Session Chair – Professor Jamila Mustafina- Kazan Federal University, Russia (DNMustafina@kpfu.ru)</p> <p>Session Co-Chair - To be confirmed</p> <p> https://ljmu.zoom.us/j/84825457789?pwd=K24yb0h0R09QWFFxSnViK2FLR0x6dz09</p>	<p align="center">2:20pm – 3:40pm UK Time</p>
<ul style="list-style-type: none"> • A Systematic Review of Wearable Devices for Tracking Physiological Indicators of Dementia-Related Agitation • Dermoscopy Cancer Detection and Classification Using Geometric Feature Based on Resource Constraints Device (Jetson Nano) • Intrusion Detection in Smart City Hospitals Using Ensemble Classifiers • Measurement Validation of Patient Vital Signs Monitoring System Using Wireless Sensor Network • Anemia Prediction Based on Rule Classification • Accurate Fall Localization for Patient Based on GPS and Accelerometer Sensor in Outside the House 	<ul style="list-style-type: none"> • The Impact of Globalization and ICT on the Education System and the Role of the Educator • The Application of Artificial Neural Networks in Learning Analytics and Educational Data Analysis • Testing the Program Determining the Impact of Teaching Methodology on a Student's Formation as a Subject of Educational Activity • Topic Modeling as a Method of Text Structuring • Computing Russian Morphological Distribution Patterns Using RusAC Online Server 	
<p align="center">COFFEE BREAK MAKING COFFEE FOR YOURSELF</p>		<p align="center">3:40pm – 3:50pm UK Time</p>
<p align="center">INVITED INDUSTRIAL SPEAKER Google, USA Dr. Obinna Anya UX Research Scientist at Google, USA BEYOND USABILITY: EXPLORING NEW HCI RESEARCH APPROACHES FOR FUTURE ESYSTEMS</p> <p> </p> <p>https://ljmu.zoom.us/j/82592563696?pwd=WVkrQWpHZkVMSUMvVW8wMkpzWlp3dz09</p>		<p align="center">3:50am – 4:30pm UK Time</p>
<p align="center">END OF SECOND DAY</p>		

DAY 3 – WEDNESDAY, 16TH DECEMBER 2020

KEYNOTE SPEAKER Prof. Radu Prodan Institute of Information Technology, Alpen-Adria-Universität Klagenfurt, Austria		11:30am – 12:30pm UK Time
 https://ljmu.zoom.us/j/86856853188?pwd=cWtDQldFckZaaVdHbUM0c2pIL2tQdz09		
COFFEE BREAK MAKING COFFEE FOR YOURSELF		12:30pm – 12:40pm UK Time
SESSION E1 Advanced Materials for Maintenance and Strengthening in Bridges and Buildings	SESSION E2 Engineering and Sustainable Development	12:40pm – 2:00pm UK Time
Session Chair Prof. Nazar Oukaili - University of Baghdad, Iraq Session Co-Chair- Prof. Abbas Allawi, University of Baghdad, Iraq  https://ljmu.zoom.us/j/85046934865?pwd=VjRXaWV1aEVSSzRLVmMydk9nWkwxdz09	Session Chair – Dr Zaid Al-Azzawi, University of Anbar, Iraq Session Co-Chair- Prof Dr. Ibrahim A. Al-Jumaili, Iraq  https://ljmu.zoom.us/j/82212784837?pwd=MUdOdVNGUFd6UWRuVmNEZUtVINRZz09	
<ul style="list-style-type: none"> • Relation Between Swelling Pressure and Potential Expansion Soil With Atterberg Limits • Simulated Annealing Algorithm Based Tuning of LQR Controller for Overhead Crane • Effects of Base Isolation on the Nonlinear Dynamic Response of Reinforced Concrete Buildings Having Different Heights • Enabling Conditions and Further Development for the Use of Solar Energy the Power Supply System of Buildings (for Example, in Central Asia, Iraq) - • Some Properties of Hardened Concrete Containing Waste Glass Powder as Partial Replacement of Cement 	<ul style="list-style-type: none"> • Viability Study on the Use of Nano-Limestone and Egg-Shell Ash as Cement Replacement in Eco-Friendly Self-Consolidating Concrete • Mechanical Properties of Waste Plastic for the Shotcrete Concrete That Used for Tunnelling • The Potential of Using Recycled Waste Glass as Coarse Aggregate in Production of Foamed Concrete • Strength and Shrinkage Behaviour of Recycled Concrete Aggregate Self-Compacting Concrete • Determination of Groundwater Potential Zone in Arid and Semi-Arid Regions: A Review • Automatic Tool Path Generation Based Freeform Features Recognition • Assessment of Surface Course Asphalt Concrete by Cyclic and Static Loading 	
COFFEE BREAK MAKING COFFEE FOR YOURSELF		2:00pm – 2:10pm UK Time

<p style="text-align: center;">SESSION F1 Cloud and IoT systems & applications</p> <p>Session Chair- Dr. Rakan Aldmour, University of Staffordshire, UK (rakan.aldmour@staffs.ac.uk)</p> <p>Session Co-Chair- Dr. Asma Patel – University of Staffordshire, UK (Asma.Patel@staffs.ac.uk)</p> <p> https://ljmu.zoom.us/j/82475103077?pwd=bEM5NjZHSVkvQWxjSmNTWlI0SXFHUT09</p>	<p style="text-align: center;">SESSION F2 Advances in Machine Learning and Natural Language Processing</p> <p>Session Chair - Dr.Liyakathunisa Syed, Taibah University, Madinah, Saudi Arabia (eMail- TBC)</p> <p>Session Co-Chair- Dr Hoshang Kolivand, Liverpool John Moores University, United Kingdom (eMail- TBC)</p> <p> https://ljmu.zoom.us/j/86706189871?pwd=YTc3Wk05a2J1bFFFQ0ZleXFjUk5xZz09</p>	<p>2:10pm – 3:30pm UK Time</p>
<ul style="list-style-type: none"> • Machine Vision Intelligent Travel Aid for the Visually Impaired (ITAVI) in Developing Countries • Intrusion Detection Mechanism for Large Scale Networks Using CNN-LSTM • A Joint Embedding Technique for Sequential Recommendation • A Cloud Computing Capability Model for Large-Scale Semantic Annotation • Spatio-Temporal Analysis of the Spread COVID-19 in Saudi Arabia 	<ul style="list-style-type: none"> • The Application of Statistical Methods in the Development of Cyrillic-Latin Converter for Tatar Language • Sentiment Analysis of COVID-19 on Saudi Trending Hashtags Using Recurrent Neural Network • Infant Cry Classification Using Semi-Supervised K-Nearest Neighbor Approach • Overcoming Speech Anxiety Using Virtual Reality with Voice and Heart Rate Analysis 	
<p>END OF THIRD DAY</p>		

DAY 4 – THURSDAY, 17TH DECEMBER 2020

<p>SPECIAL TRACK Future Generation Computing Session Chair Prof Anatoliy Gorbenko, Leeds Beckett University</p> <p></p> <p>https://ljmu.zoom.us/j/86704582087?pwd=dDVHMzhhV1prREJsTEd1cTZzd3BNZz09</p>	
<ul style="list-style-type: none">• Non-Random Weight Initialisation in Deep Convolutional Networks Applied to Safety Critical Artificial Intelligence• A Survey of Technology Acceptance Models in the Creative Industry: Exploring Key Limitations• Towards A Micro Grid Based Residential Home Energy Management Using Genetic Algorithm• Interval Approach for Stability Analysis of a Pressurized Water Reactor With Parametric Uncertainty Using LMI Based H-Infinity Controller• AI in Law Practices	<p>11:00pm – 12:30pm UK Time</p>
<p>COFFEE BREAK MAKING COFFEE FOR YOURSELF</p>	<p>12:30pm – 12:40pm UK Time</p>

<p style="text-align: center;">SESSION G1</p> <p style="text-align: center;">A Fusion of Data Science and Machine Learning Technology</p> <p>Session Chair - Dr Ahmed J. Aljaaf, University of Anbar, Ramadi, IRAQ. Session Co-Chairs- Dr Salah L. Zubaidi, University of Wasit, Iraq. Dr Mohammed Alloghani- Artificial Intelligence Office, Dubai, UAE.</p> <p> https://ljmu.zoom.us/j/88505359134?pwd=Qmp5VWxnRnRFdE03dIRYSHVka1Nzd09</p>	<p style="text-align: center;">SESSION G2</p> <p style="text-align: center;">Artificial Intelligence, Internet of Thing & Big Data: Recent Trends, Challenges & Future Applications</p> <p>Session Chair - Dr. Tanzila Saba, Prince Sultan University, Riyadh, Saudi Arabia Session Co-Chair- Dr Hoshang Kolivand, Liverpool John Moores University, United Kingdom</p> <p> https://ljmu.zoom.us/j/87342367372?pwd=TldTNXIrckYvcjVVMlUckdlSERZUT09</p>	<p>12:40pm – 2:10pm UK Time</p>
<ul style="list-style-type: none"> • Crowdsourcing Cybercrimes Through Online Resources • Legal Regulation of Crowdfunding • Palm Vein Recognition, a Review on Prospects and Challenges Based on CASIA's Dataset • Accurate Infants Remote Temperature Monitoring System Based on Contactless Temperature Sensor and GSM Network • Wireless Power Transfer Based on Spiral-Spider Coils for Wireless Heart Rate Sensor • A Survey of Positioning Systems for Ships Based on New Categories 	<ul style="list-style-type: none"> • Anomaly Based Intrusion Detection System Using Hierarchical Classification and Clustering Techniques • A New Email Phishing Training Website • Need for Interpretable Student Performance Prediction • MAD-Malicious Activity Detection Framework in Federated Cloud Computing • A Systematic Review of Artificial Neural Networks in Medical Science and Applications • Towards a Context-Aware Digital Government in Iraq: A Public Sector Employees' Perspective 	
<p>CONCLUDING DISCUSSION AND REMARKS, CLOSING THE CONFERENCE</p> <p>https://ljmu.zoom.us/s/82003830579</p>		<p>2:10pm – 3:30pm UK Time</p>