

The 25th International Conference on Automation and Computing (ICAC'19) (Parallel Session index)

10:45 - 12:15 06/09/2019 Parallel Sessions (A-1, A-2, A-3, A-4, A-5, A-6)

Time	A-1 Control Engineering 1 Venue: LT1 (LUMS) Chair: Luo, Xichun, Zeng, Wenhan	A-2 Information System 1 Venue: A16 (Charles Cater) Chair: Wang, Zidong, Liu, Cunjia	A-3 Manufacturing System 1 Venue: A17 (Charles Cater) Chair: Yang, Jian-Bo; Xu, Dong-Ling	A-4 Computer Vision and Computer Graphics 1 Venue: A18 (Charles Cater) Chair: Yue, Hong; Zhu, Quanmin	A-5 Condition Monitoring and Systems 1 Venue: A15 (Charles Cater) Chair: Xiang, Jianping; Lou, Shan;	A-6 Power & Energy Applications 1 Venue: LT3 (LUMS) Chair: Shen Yue; Zhang Duo
10:45 - 11:00	A-1.1 #54 <i>Shen, Yuxuan; Wang, Zidong*; Shen, Bo</i> Resilient Recursive State Estimation for Discrete Time-Varying Systems with Deception Attacks	A-2.1 #16 <i>Liu, Xi*; Sachan, Swati; Yang, Jian-Bo; Xu, Dong-Ling</i> Maximum Likelihood Evidential Reasoning-Based Hierarchical Inference with Incomplete Data	A-3.1 #48 <i>Zhang, Qiushuang; Zeng, Wenhan; Lou, Shan; Jin, Xin*; Scott, Paul; Jiang, Jane</i> Geometric Errors and CAD Model Integration Method for Precision Assembly	A-4.1 #6 <i>Tu, Jun; Huang, Teng*; Liu, Xusong; Gao, Fei; Yang, Erfu</i> A Novel HRRP Target Recognition Method Based on LSTM and HMM Decision-making	A-5.1 #22 <i>Sachan, Swati*; Donchak, Nishant</i> Multi-Segment Deep Convolution Neural Networks for Classification of Faults in Sensors at Railway Point Systems	A-6.1#26 <i>Xiang, Beth J*; Wu, Zifeng; Shi, Qiong; Liu, Bowen; Jiang, Huadan</i> Study on wind turbine drive train faults based on a Semi-physical simulation platform
11:00 - 11:15	A-1.2 #56 <i>Zhao, Di; Wang, Zidong*; Wei, Guoliang</i> I ₂ -I-infinity PID Output-Feedback Control for Discrete Time-Delay Systems	A-2.2 #38 <i>Liu, Yi; Xu, Yuchun</i> Summary of Cloud Robot Research	A-3.2 #50 <i>Yang, Manman; Yang, Erfu; Zante, Remi; Post, Mark; Liu, Xuefeng*</i> Collaborative mobile industrial manipulator: A review of system architecture and applications	A-4.2 #12 <i>Syam, Wahyudin P.*; Bansal, Ridhi; Benardos, Panorios; Britchford, Emily; Hopkinson, Andrew; Voisey, K. T.; T. Branson III, David</i> Image processing algorithm to determine an optimised 2D laser cutting trajectory	A-5.2 #36 <i>Hao, Yu*; Gledhill, Duke; Liu, Ying; Fan, Jiulun; Xu, Zhijie</i> An Effective Pipeline for Pedestrian Detection in Mid-High Density Crowd	A-6.2 #37 <i>Liang, Yu*; Zhou, Lawu; Han, Bing; Yang, Binyou; Luo, Bingqian</i> An Individual Blade Pitch Control Strategy for Floating Offshore Wind Turbine
11:15 - 11:30	A-1.3 #10 <i>Zhang, Qichun*; Yue, Hong</i> Data-driven Distribution Tracking for Stochastic Non-linear Systems via PID Design	A-2.3 #47 <i>Tokucoglu, Hande*; Chen, Xun; El Rhalibi Abdennour; Opoz, Tahsin</i> Sensor Based Cost Modelling for a Knowledge Support System Development	A-3.3 #52 <i>Zhao, Zexiang*; Zhao, Xinyu; Liu, Ruyi; Ren, Dongxu; Cao, Yanlong; Zeng, Wenhan</i> Study on the measurement of global sizes of cylindrical parts using Talyrond 585LT	A-4.3 #33 <i>Ma, Ning*</i> A SoC-based acceleration method for UAV runway detection image pre-processing algorithm	A-5.3 #45 <i>Feng, Bo; Zhang, Dahai; Si, Yulin; Tian, Xiang; Qian, Peng*</i> A condition monitoring method of wind turbines based on Long Short-Term Memory neural network	A-6.3 #72 <i>Ni, Chenhua*; Ma, Xiandong; Wang, Ji</i> Integrated deep learning model for predicting electrical power generation from wave energy converter
11:30 - 11:45	A-1.4 #57 <i>Li, Jiahui; Wang, Zidong*; Dong, Hongli</i> H-infinity State Estimation for Neural Networks Subject to Missing Measurements	A-2.4 #63 <i>Tao, Qing*; Kang, Jinsheng; Li, Zhaobo; Liu, Lili; Wang, Shoudong; Zhang, Kaituo; Ren, Jiaye,</i> Upper limb muscle strength prediction based on motion capture and sEMG data	A-3.4 #53 <i>Tian, Lulu; Wang, Zidong*; Cheng, Yuhua</i> MOI-Based Stratified Crack Detection: A PCA Approach	A-4.4 #39 <i>Jiang, Tao*; Cao, Yunfeng; Zhuang, Likui; Zhang, Zhouyu; Ding, Meng</i> Deep Convolutional Neural Network Based Small Space Debris Saliency Detection	A-5.4 #51 <i>García, Eustaquio*; Chen, Xun; Ait Ouarab, Lounis</i> Abrasive Feature Related Acoustic Emission in Grinding	A-6.4 #160 <i>Ma, Jie*; Ma, Xiandong</i> Consensus-based Hierarchical Demand Side Management in Microgrid
11:45 - 12:00	A-1.5 #32 <i>Davies, Iyayi*, Haas. O. C. L</i> Absolute Stability Results for Low Gain Integral Control Problem of Neutral Type in the Presence of Quantization	A-2.5 #100 <i>Almaghrabi, Fatima*; Xu, Dong-Ling; Yang, Jian-Bo</i> A new machine learning technique for predicting traumatic injuries outcomes	A-3.5 #58 <i>Fu, Jianlin; Tang, Jianjun; Wang, Ruoxin; Liang, Hongqin; Zhang, Jian*</i> An Order Inserting Predictive-reactive Batch-splitting Scheduling Method	A-4.5 #146 <i>Chen, Jun; Xu, Yuanping*; Zhang, Chaolong; Xu, Zhijie; Wang, Jie</i> An Improved Two-stream 3D Convolutional Neural Network for Human Action Recognition	A-5.5 #123 <i>Wang, Ke; Yue, Hong*</i> Auto-updating of Sampling Time Redesign for System Identification under Parameter Uncertainty	A-6.5 #99 <i>Li, Cheng*; Wang, Dan; Liu, Di; Wu, Jiahe; Li, Yaowang; Mao, Chengxiang; Wang, Jihong</i> Mathematical Modelling of Large-Scale Compressed Air Energy Storage Systems
12:00 - 12:15	A-1.6 #145 <i>Alabied, Samir*; Daraz, Alsadak; Rabeyee, Khalid; Alqatawneh, Ibrahim; Gu, Fengshou; Ball, Andrew</i> Motor Current Signal Analysis Based on Machine Learning for Centrifugal Pump Fault Diagnosis	A-2.6 #148 <i>Dang, Thanh Trung*; Cheng, Yongqiang; Mann, Joanne; Hawick, Ken; Li, Qingde</i> Fire Risk Prediction Using Multi-Source Data: A case study in Humberside area	A-3.6 #69 <i>Wang, Zhengjian; Cai, Yukui; Luo, Xichun*</i> Modelling and Simulation of cutting process by Smoothed Particle Hydrodynamics (SPH): A Review	A-4.6 #156 <i>Xu, Yuanping*; Dong, Xude; Xu, Zhijie; Huang, Jian; Zhang, Chaolong</i> A Dynamic Hand Gesture Recognition Model based on the Improved Dynamic Time Warping Algorithm	A-5.6 #77 <i>Yu, Leijian*; Leijian Yu, Erfu Yang*, Peng Ren, Cai Luo, Gordon Dobie, Dongbing Gu, Xiutian Yan</i> Inspection Robots in Oil and Gas Industry: a Review of Current Solutions and Future Trends	A-6.6 #122 <i>Wysocki, Oskar*; Deka, Lipika; Elizondo, David A.</i> Heavy duty vehicle fuel consumption modelling using artificial neural networks

12:15 - 13:15 06/09/2019 Lunch and poster viewing (Foyer & Hub area, LUMS building)

13:15 - 13:30 06/09/2019 Photo Session

13:30 – 15:00 06/09/2019 Parallel Sessions (P1-1, P1-2, P1-3, P1-4, P1-5, P1-6)

Time	P1-1 Control Engineering 2 Venue: LT1 (LUMS) Chair: Xu, Zhijie	P1-2 Information System 2 Venue: A16 (Charles Cater) Chair: Zhang,jie	P1-3 Manufacturing System 2 Venue: A17 (Charles Cater) Chair: Qing, Shengfeng	P1-4 Computer Vision and Computer Graphics 2 Venue: A18 (Charles Cater) Chair: Yang, Taicheng,	P1-5 Condition Monitoring and Systems 2 Venue: A15 (Charles Cater) Chair: Chen, Wenhua	P1-6 Power & Energy Applications 2 Network Application and Security 1 Venue: LT3 (LUMS) Chair: Xu, Yuchun
13:30 - 13:45	P1-1.1 #73 <i>Lin, Zhidong; Luo, Jing; Yang, Chenguang*</i> A Teleoperated Shared Control Approach with Haptic Feedback for Mobile	P1-2.1 #103 <i>Umair, Muhammad*; Shah, Munam Ali; Hamza Sarwar, Muhammad</i> Barriers of Requirement Change Management Process in the Context of Global Software Development	P1-3.1 #59 <i>Ren, Dongxu*; Zhao,Zexiang; Li, Bin; Zeng,Wenhan</i> Influence of Exposure Energy Control for High Voltage Pulsed Xenon Lamp on the Lithography Accuracy of Linear Grating	P1-4.1 #143 <i>Egaji, Oche A; Asghar, Ikram*; Warren, William; Griffiths, Mark; Evans, Simon</i> An Augmented Reality Application for Personalised Diamond Shopping	P1-5.1 #121 <i>Pilario, Karl Ezra S*; Cao, Yi; Shafiee, Mahmood M; Lao, Liyun</i> Reconstruction based Fault Prognosis in Dynamic Processes using Canonical Variate Analysis	P1-6.1 #98 <i>Wang, Dan*; Zhou, Li; Liu, Di; Li, Cheng; Wu, Jiahe; Mao, Chengxiang; Wang, Jihong</i> Novel Equivalent Physical Simulation Model of a Compressed Air Energy Storage System and Its Implementation
13:45 - 14:00	P1-1.2 #35 <i>Gu, Yuanlin*; Wei, Hua-Liang; Balikhin, Michael A.; Boynton, Richard; Walker, Simon N.</i> Machine Learning Enhanced NARMAX Model for Dst Index Forecasting	P1-2.2 #105 <i>Naeem, Afrah*; Shah, Munam Ali; Aslam, Zeeshan</i> Analyzing Quality of Software Requirements; A Comparison Study on NLP Tools	P1-3.2 #129 <i>Bansal, Ridhi; Ahmadiehkhanezar, Mojtaba*; Branson, David</i> Ant Colony Optimization Algorithm for Industrial Robot Programming in a Digital Twin	P1-4.2 #126 <i>Hu, Ling; Ni, Qiang*</i> Quantum Automated Object Detection Algorithm	P1-5.2 #71 <i>Zheng, Ge*; Zhang, Hongtao; Zhou, Keming ; Hu, Huoheng</i> Using Machine Learning Techniques to Optimize Fall Detection Algorithms in Smart Wristband	P1-6.2 #60 <i>Deng, Feng*; Zeng, Xiangjun; Yu, Mao; Zu, Yaru; Mei, Longjun</i> A Novel Multi-terminal Fault Location Method based on Traveling Wave Time Difference for Active Distribution Network
14:00 - 14:15	P1-1.3 #41 <i>Luo, Jing; Liu, Chao; Li, Yanan; Yang, Chenguang*</i> A Framework of Human impedance Estimation for Human-Robot Interaction	P1-2.3 #107 <i>Hamza Sarwar, Muhammad*; Shah, Munam Ali ; Umair, Muhammad; Faraz, Syed Hassnain</i> Network of ECUs Software Update in Future vehicles	P1-3.3 #161 <i>Ma, Qiucheng*; Lin, Keqiang; Ni, Binqing; Lu, Ange; Song, Yin; Liu,Luxiang; Liu,Yu; Tang, Xinzi</i> Design of an Automatic Lotus Plumule Removing Machine	P1-4.3 #140 <i>Fei, Zixiang; Yang, Erfu*; Li, David; Butler, Stephen; Ijomah, Winifred; Zhou, Huiyu</i> Combining Deep Neural Network with Traditional Classifier to Recognize Facial Expressions	P1-5.3 #131 <i>Liu, Yinghui; Zhang, Huibo; Zhen, Dong*; Zhang, Hao; Shi, Zhanqun; Gu, Fengshou</i> Fault Diagnosis of Planetary Gear System Based on Nonlinear Time-varying Dynamic Model Analysis	P1-6.3 #27 <i>Palmer, Neville*</i> An Application to Automate Assessment in a Computer Networking Laboratory
14:15 - 14:30	P1-1.4 #49 <i>Hussain, Fida; Shen, Yue *; Zhang, Duo; Liu, Guohai</i> Model Predictive Control for Steering-less Electric Vehicle with Independent four in-Wheel Motors	P1-2.4 #118 <i>Aslam, Ayesha*; Shah, Munam Ali; Kanwal, Laraib; Maher, Sehreen Manzoor</i> An Aspect of Internet of Things Security: Analysis of Digital Fingerprinting of Generic Twitter Sessions by Using Forensic Tools	P1-3.4 #127 <i>Nakamura, Sakuya*; Kimura, Masaomi</i> A calculation cost reduction method for a log-likelihood maximization in word2vec	P1-4.4 #163 <i>Jian, Muwei; Wang, jing; Yu, Hui; Ju Yakun</i> Visual Saliency Detection Via Background Features and Object-Location Cues	P1-5.4 #134 <i>Li, Haiyang; Zhen, Dong; Otuyemi, Funso; Gu, Fengshou *; Ball, Andrew</i> Broken Rotor Bar Detection Using Mathematical Morphology Based on Instantaneous Induction Motor Electrical Signals Analysis	P1-6.4 #66 <i>Aredla, Jyothi*; Zhang, Sijing; Liu, Enjie</i> Relia-MAC: Timely and Reliable Communication for Safety Critical Applications of VANET
14:30 - 14:45	P1-1.5 #158 <i>Zhu, Changhao*; Zhang, Jie</i> Developing Robust Nonlinear Models through Bootstrap Aggregated Deep Belief Networks	P1-2.5 #82 <i>Munir, Shafaq*; Shah, Munam Ali ; Kanwal, Laraib; Maher, Sehreen Manzoor; Shah, Muhammad Jalal</i> DDoS in IoT: A Roadmap Towards Security & Countermeasures	P1-3.5 #132 <i>Han, Xin; Li, Rong*; Li, Weiyang; Ding, Guofu; Qin, Shengfeng</i> User requirements dynamic elicitation of complex products from social network service	P1-4.5 #151 <i>Rabeyee, Khalid E Ahmed*; Xu,Yuandong; Gu, Fengshou; Ball, Andrew D</i> A Novel Wavelet Thresholding Method for Vibration Data Denoising and Diagnostic Feature Enhancement in Condition Monitoring	P1-5.5 #135 <i>Thanapalan, Kary*; Bowkett, Mark; Constant, Ewen</i> Advanced Failure Prevention Mechanisms for Unmanned Aerial Vehicles	P1-6.5 #125 <i>Mahmoud, Haitham Hassan M*; Wu, Wenyang; Wang, Yonghao</i> Secure Data Aggregation Mechanism for Water Distribution System using Blockchain
14:45 - 15:00	P1-1.6 #1 <i>Tate, Oliver; Cheneler, David; Taylor, C. James*</i> Simplified models for heating system optimisation using the thermal-electrical analogy	P1-2.6 #84 <i>Munir, Shafaq*; Shah, Munam Ali ; Shah, Muhammad Jalal; Umer, Muhammad; Javed, Muhammad Ali</i> A Novel Model for HD video calling in 5G Networks	P1-3.6 #138 <i>Sivanathan, Sivagunalan*; Oleon,A.; Thannapalan, K.K.T.; McCarthy, P</i> Real-Time Wireless Vibration Logger Skeleton Run	P1-4.6 #157 <i>Fu, Yichuan*; Liu, Yuanhong; Gao, Zhiwei</i> Multiple Actuator Fault Classification in Wind Turbine Systems Using Multi-linear Principal Component Analysis Techniques	P1-5.6 #137 <i>Mondal, Debanjan*; Haba, Usama; Gu, Fengshou ; Ball, Andrew</i> Airborne Acoustic Signature Analysis for Fault Diagnosis of Reciprocating Compressors Using Modulation Signal Bi-spectrum	P1-6.6 #139 <i>Wang, Shengkai*; Zhang, Jie</i> An Intelligent Process Fault Diagnosis System Integrating Andrews Plot, PCA and Neural Networks

15:00 – 15:30 06/09/2019 Coffee Break and poster viewing (Foyer & Hub area, LUMS building)

15:30 - 17:00 06/09/2019 Parallel Sessions (P2-1, P2-2, P2-3, P2-4, P2-5, P2-6)

Time	P2-1 Control Engineering 3 Venue: LT1 (LUMS) Chair: Kang, Jinsheng,	P2-2 Information System 3 Venue: A16 (Charles Cater) Chair: Yang, Erfu	P2-3 Manufacturing System 3 Venue: A17 (Charles Cater) Chair: Wang,Jing;	P2-4 Network Application and Security 2 Venue: LT3 (LUMS) Chair: Yang, Chenguang	P2-5 Condition Monitoring and Systems 3 Venue: A15 (Charles Cater) Chair: Cheng, Yongqiang	
15:30 - 15:45	P2-1.1 #11 <i>Zhang, Qichun*</i> ; <i>Hu, Zixiang</i> ; <i>Hu, Liang</i> Entropy-based Extended Kalman Filtering for Stochastic Non-linear Systems with Polynomial Compensation	P2-2.1 #101 <i>Awaisi, Kamran Sattar*</i> ; <i>Shah, Munam Ali</i> ; <i>Lqbal, Danish</i> ; <i>Abbasi, Tehseen Riaz</i> Coronary Artery Bypass Grafting (CABG) Anatomy with E-Learning Environment.	P2-3.1 #65 <i>Alarfaj, Yousaf</i> ; <i>Taylor, C. James*</i> Eigenvalue Analysis and Case Study Examples of Fractional Order Generalised Predictive Control	P2-4.1 #67 <i>J Aredla, Jyothi*</i> ; <i>Zhang, Sijing</i> ; <i>Liu, Enjie</i> An Adaptive and Reliable Communication Method for Road Safety Applications of VANET	P2-5.1 #142 <i>Daraz, Alsadak*</i> ; <i>Alabied, Samir</i> ; <i>Gu, Fengshou</i> ; <i>Ball, Andrew</i> Modulation Signal Bispectrum Analysis of Acoustic Signals for the Impeller Wear Detection of Centrifugal Pumps	
15:45 - 16:00	P2-1.2 #3 <i>Alotaibi, Sultan*</i> ; <i>Grimble, Michael</i> Optimal Generalized Predictive Functional Control with Applications to Extended PID Control for Quadruple Tank	P2-2.2 #150 <i>Malik, Fahda*</i> ; <i>Khattak, Hasan Ali</i> ; <i>Shah, Munam Ali</i> Evaluation of the Impact of Traffic Congestion Based on SUMO	P2-3.2 #124 <i>Zhu, Ning</i> ; <i>Gao, Kai*</i> ; <i>Yan, Di</i> ; <i>Dong, Pingping</i> ; <i>Du, Ronghua</i> ; <i>Wu, Wenguang</i> Modeling and analysis of hydraulic braking system of low-floor tram based on AMESim	P2-4.2 #68 <i>Karimireddy, Thanmayee*</i> ; <i>Zhang, Sijing</i> A Hybrid Method for Secure and Reliable Transmission on Industrial Automation	P2-5.2 #144 <i>Mones, Zainab*</i> ; <i>alqatawneh, Ibrahim</i> ; <i>Zhen. Dong</i> ; <i>Gu, Fengshou</i> ; <i>Ball, Andrew</i> Fault Diagnosis for Planetary Gearbox Using OnRotor MEMS Sensor and EMD Analysis	
16:00 - 16:15	P2-1.3 #62 <i>Madubuike, Kingsley*</i> ; <i>Mayhew, Cliff</i> ; <i>Zhang, Qian</i> ; <i>Gomm, Barry</i> ; <i>Yu, Ding-Li</i> Fault diagnosis for wind turbine systems using unknown input observer	P2-2.3 #87 <i>Khan, Attiya*</i> ; <i>Shah, Munam Ali</i> A Survey on secure routing strategies in VANETs	P2-3.3 #18 <i>Huang, Yanli*</i> ; <i>Wang, Jianming</i> ; <i>Yang, Erfu</i> Robust Passivity of Coupled Cohen-Grossberg Neural Networks with Reaction-Diffusion Terms	P2-4.3 #159 <i>Eze, Joy*</i> ; <i>Eze, Elias</i> ; <i>Zhang, Sijing</i> ; <i>Liu, Enjie</i> Design Optimization of Resource Allocation in OFDMA-based Cognitive Radio-enabled Internet of Vehicles (IoVs)	P2-5.3 #147 <i>ElSabaa, AlaaAllah*</i> ; <i>Ward, Michael</i> ; <i>Wu, Wenyan</i> Hybrid Localization techniques in LoRa-based WSN	
16:15 - 16:30	P2-1.4 #61 <i>Madubuike, Kingsley*</i> ; <i>Mayhew, Cliff</i> ; <i>Zhang, Qian</i> ; <i>Gomm, Barry</i> ; <i>Yu, Ding-Li</i> Fault diagnosis for wind turbine systems using a neural network estimator	P2-2.4 #97 <i>Ali, Hammad*</i> ; <i>Shah, Munam Ali</i> <i>Smart Cities: Methods, Encounters & Hunt for Future - Survey</i>			P2-5.4 #149 <i>Alashter, Aisha</i> ; <i>Cao, Yunpeng</i> ; <i>Gu, Fengshou</i> and <i>Ball, Andrew</i> Fault Diagnosis of Broken Rotor Bar in AC Induction Motor based on A Qualitative	
16:30 - 16:45		P2-2.5 #5 <i>Anwar Ur Rehman, Zobia Rehman, Munam Ali Shah</i> Hierarchical Topic Modeling for Urdu Text Articles				

17:00 - 17:30 06/09/2019 Closing and prize giving ceremony (LT1, LUMS building)

18:00 - 20:00 06/09/2019 Conference Banquet (Marketplace Restaurant on the campus)

Poster Session (Foyer & Hub area, LUMS building)

Dates: 05/09/2019 - 06/09/2019

Session Chair: Hu, Liang

Control Engineering	Information System	Manufacturing System	Computer Vision and Computer Graphics	Power and Energy Applications
Poster 1, #2 <i>Nnabuike, Somtochukwu G*; Whidborne, James; Lao, Liyun; Cao, Yi</i> Venturi Multiphase Flow Measurement based Active Slug Control	Poster 5, #25 <i>Chen, Zhisheng; Liu, Daifei*</i> Stochastic Hinfy Filtering for Complex-valued Generalized Neural Networks with Brownian Motions and Time Delays	Poster 6, #30 <i>Cui, Lujun; Zhang, Shihao*; Guo, Shirui Zeng, Wenhan; Cao, Yanlong; Du, Hong</i> Temperature Field Simulation and Experimental Analysis of Laser Cladding 45 Steel	Poster 7, #42 <i>Adobah, Benjamin K; Liu, Guohai ; Liu, Hui*; Hussain, Fida</i> Real-Time Detection and Tracking of Moving Objects in Video Images using Background Subtraction, Kalman Filter and Particle Filter	Poster 12, #17 <i>Liu, Daifei*; Tang, Chaojun; Shi, Xianju; Cao, Haipeng; Li, Jun</i> Optimization of Modeling Parameters for Temperature Field of Iron Ore Fines
Poster 2, #19 <i>Zhang, Yuanchao*; Xu, Wei; Li, Zhengmin; He, Jiangyang</i> Review of the Vibration Isolation Technology of Submarine Thrust Bearing			Poster 8, #44 <i>Doh, Benjamin; Zhang, Duo; Shen, Yue *; Hussain, Fida; Doh, Ronky, Francis</i> Automatic Citrus Fruit Disease Detection by Phenotyping Using Machine Learning	Poster 13, #23 <i>Ren, Zhiren; Tang, Bo; Wang, Longfeng; Liu Hui; Li, Yanfei; Wu, Haiping*</i> Non-intrusive Load Identification Method Based on Integrated Intelligence Strategy
Poster 3, #43 <i>Zhou, Linxuan*; Gao, Jingwei; Li, Qian; Hu, Cheng; Wang, Ruichen</i> Numerical Simulation Analysis of Interaction Model between Track and Sandy			Poster 9, #128 <i>Liu, Kun; Li, Aimei*; Xi, Wen; Chen, Haiyong; Yang, Peng</i> Steel Surface Defect Detection Using GAN and One-Class Classifier	Poster 14 #24 <i>Liu, Daifei*; Yang, Hongjia; Chen, Xiaowu; Xiang, Jianping</i> A Modeling and Parameter Optimization Approach for a Pendulum Wave Energy
Poster 4, #133 <i>Lu, Xiaoyu*; Yang, Peng; Sun, Jianjun</i> Disturbance Observer Based Fast Terminal Sliding Mode Control for Lower Limb			Poster 10, #141 <i>Han, Jiangrui*; Liu, Kun; Yan, Haowei; Chen, Haiyong; Yang, Peng</i> Defect detection on EL images based on deep feature optimized by metric learning	Poster 15, #31 <i>Lv, Xinwei; Ren, Zhiren; Tang, Bo; Liu, Hui; Yang, Rui; Wu, Haiping*</i> Hybrid Load Identification Model Based on Grey Wolf Optimization Algorithm
Poster 16, #46 <i>Sun, Jianjun; Yang, Peng; Wang, Jie; Zhang Gaowei; Zhang Yan</i> Model-Free Based Back-Stepping Sliding Mode Control for Wearable Exoskeletons			Poster 11, #152 <i>Liu, Jinxuan*; Dong, Junyu; Yu, Hui; Zhang, Shu; Gao, Ying; Zhang, Tiange</i> Dual Stage Augmented Colorful Texture Synthesis from Hand Sketch	

Workshop (LT3, LUMS building), theme: Improving System Performance through Automation and Computing

Time/date: 14:30-16:30, 05/09/2019

Workshop Chair: Yang, Taicheng

	Speakers	Presentation title
14:30 – 15:00	Shan Lou	Surface Metrology for Additive Manufacturing
15:00 – 15:30	Chenguang Yang	Human-like Control Design and Human Robot Skills Transfer
15:30 – 16:00	Dong-Ling Xu	Data-Driven Evidential Reasoning for Interpretable Machine Learning and Its Application in Fraud Detection
16:00 – 16:30	Jing Wang	Machine Learning Tools for Engineering Problems