

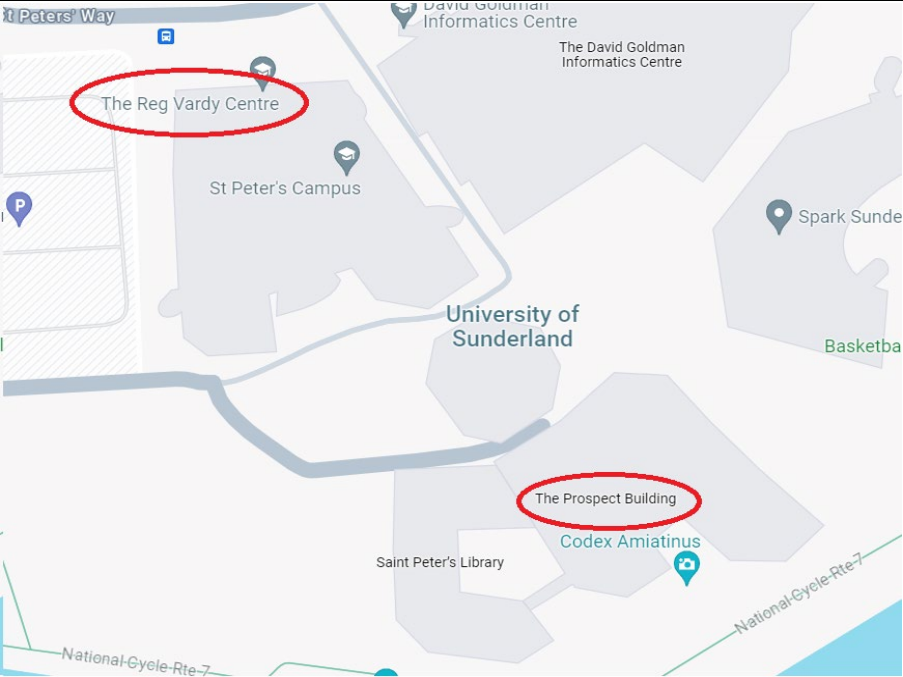
The 29th International Conference on Automation and Computing (ICAC2024)			
(Final Programme)			
Wednesday, 28/08/2024			
Time (BST)	Programme		Venue
11:00 - 13:00	Workshop 1: Towards Human-Centered Intelligent Cockpits for Automated Vehicles		Prospect Building, Room 009
13:00 - 14:00	Lunch		Prospect Building
14:00 - 15:30	Workshop 2: Young professionals in Digital Healthcare Technology		Prospect Building, Room 009

Thursday, 29/08/2024			
09:00 - 09:15	Opening		Prospect Building, TCLT
09:15 - 11:00	Keynote Speech 1 & 2		Prospect Building, TCLT
11:00 - 11:10	Conference photo		
11:10 - 11:30	Tea break		Prospect Building
11:30 - 12:45	Parallel Session 1		Reg Vardy Building (RV)
12:45 - 14:00	Lunch / Poster session		Prospect Building
14:00 - 15:15	Parallel Session 2		Reg Vardy Building (RV)
15:15 - 15:45	Tea break		Prospect Building
15:45 - 17:15	Parallel session 3		Reg Vardy Building (RV)
18:30 - 21:30	Banquet		The Fire Station, High Street West, Sunderland, SR1 3HA

Friday, 30/08/2024			
09:00 - 09:50	Keynote Speech 3		Prospect Building, TCLT
10:00 - 11:00	Parallel Session 4		Reg Vardy Building (RV)
11:00 - 11:30	Tea break		Prospect Building
11:30 - 12:30	Parallel Session 5		Reg Vardy Building (RV)
12:30 - 13:00	Award ceremony and close		Prospect Building, TCLT
13:00 - 14:00	Lunch		Prospect Building

Parallel Session Rooms	
Room 1	Reg Vardy Building (RV304)
Room 2	Reg Vardy Building (RV305)
Room 3	Reg Vardy Building (RV309)
Room 4	Reg Vardy Building (RV312A)
Room 5	Reg Vardy Building (RV404)

Note: Video presentations are labelled by yellow background, e.g.,
 Paper ID



**The 29th International Conference on Automation and Computing
(ICAC 2024)**

Thursday, 29th August 2024

Session 1

Room 1	Chair:	Biswas, Mriganka	Artificial Intelligence 1
Session 1 (A)	Co-chair:	Wen, Tao	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	32	The Impact of Education Level on AI Reliance, Habit Formation, and Usage	Biswas, Mriganka*; Murray, John C
11:45 - 12:00	37	Leveraging machine learning for browser-based detection of misinformation: Towards user-empowered news consumption	Afolabi, Oluwaseun B*; Ara, Safina
12:00 - 12:15	41	A Brief Review of Recent Advances in AI-Based 3D Modeling and Reconstruction in Medical, Education, Surveillance and Entertainment	Khan, Gulraiz*; Maraha, Heyam; Li, Qingde; Pimblett, Kevin
12:15 - 12:30	46	Elevating Cybersecurity for Smart Grid Systems—A Container-Based Approach Enhanced by Machine Learning	Abukeshek, Mays*; Barakat, Basel; Ajayi, Bamidele
12:30 - 12:45	52	Forecasting Time Series through Motif Structure Analysis within Visibility Graph	Wen, Tao*; Chen, Yu-wang

Session 2

Room 1	Chair:	Xu, Zhijie	Artificial Intelligence 2
Session 2 (A)	Co-chair:	Yi, Dewei	
Time (BST)	Paper ID	Authors	Paper title
14:00 - 14:15	65	Power System Variables Selection in Static security Assessment for Binary-Class Support Vector Machine	Borisagar, Jignesh Haresh; Dhandhia, Astik K*
14:15 - 14:30	68	Artificial Neural Network for Transient Stability Assessment: A Review	Shahzad, Umair*
14:30 - 14:45	69	Support Vector Machine for Transient Stability Assessment: A Review	Shahzad, Umair*
14:45 - 15:00	70	Automating Security Incident Response in SCADA Systems through SIEM-ML Integration	Khan, Fakhri Alam*; Aldahasi, Ezaz Mohammed
15:00 - 15:15	72	Research on Dynamic Scheduling Method for Reentrant Hybrid Flow Shop with Batch Processing Machines	Ren, Xiaoyu; Shi, Yi; Wang, Shuying; Zhang, Jian*

Session 3

Room 1	Chair:	Lu, Zhenyu	Artificial Intelligence 3
Session 3 (A)	Co-chair:	Huang, Qiang	
Time (BST)	Paper ID	Authors	Paper title
15:45 - 16:00	80	Service Recommendation of Industrial Software Components for Diversified Applications in Industrial Internet	Liu, Junjian*; Cheng, Lianglun; Wang, Tao; Ni, Mingzhe
16:00 - 16:15	84	Dual Data and Mechanism Based Prediction Model for Photovoltaic Modules	Kuang, Zhaoqi*; Ma, Changjiang; Zhang, Hexu; Li, Lin; Li, Yun
16:15 - 16:30	131	Federated Classifier Fusion - An Evidential Reasoning Approach	Seo, Jungmin*
16:30 - 16:45	138	Who is Authentic Speaker?	Huang, Qiang*
16:45 - 17:00	140	Lightweight Detection Method for Plaid Pattern Defects with Rank Self-selection Decomposition	ZHU, ZIXUN*; Zhang, Jie; Wang, Junliang; Zhang, Mingzhi
17:00 - 17:15	122	Gesture Capture and Recognition of Wearable Systems Based on Smart Textile Materials	Peng, Qinyao; He, Mengyuan; Ma, Liyun; Li, Xinxin; Chen, Keran; Lu, Zhenyu*; Wang, Ning

Room 2	Chair:	Qin, Shengfeng	Autonomous vehicle
Session 1 (B)	Co-chair:	Kuang, Boyu	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	108	Autonomous Vehicle Pedestrian Detection & Traffic Sign Recognition Using YOLOv8	Logeswaran, Iswariya*; Eissa, Hazem; Almadhoun, Randa

Room 2	Chair:	Biswas, Mriganka	Cyber Security
Session 2 (B)	Co-chair:	Lo, Carol	
Time (BST)	Paper ID	Authors	Paper title
14:00 - 14:15	30	Digital Twins of Cyber Physical Systems in Smart Manufacturing for Threat Simulation and Detection with Deep Learning for Time Series Classification	Lo, Carol*; Win, Thomas; Rezaeifar, Zeinab; Khan, Zaheer A; Legg, Phil

Room 2	Chair:	Wang, Jing	Computer Vision
Session 3 (B)	Co-chair:	Ren, Jiadong	
Time (BST)	Paper ID	Authors	Paper title
15:45 - 16:00	63	PTNet: An improved algorithm for object tracking	Lu, Chenglin; Yajuan, Wei*; Li, Jin; Dai, Chuan; Liu, Ying; Xu, Zhijie

11:45 - 12:00	136	Advanced Autonomous Vehicle Acceptance Model (AAVAM) for Promoting Accessible Travel	Chen, Liling ; Yang, Liu; Luan, Xin; Yang, Liying; Song, Yicong; Qin, Shengfeng*
12:00 - 12:15	166	Auditory Hazard Notifications in Intelligent Cockpits: The Impacts on Driver Trust and Workload during Automated Driving	Su, Yizi*; Li, Qingkun; Wang, Zhenyuan; Wang, Wenjun; Huang, Zeyuan; Ma, Cuixia
12:15 - 12:30	60	Adaptive Parameter Tuning Method for the Pulse-Width Pulse-Frequency modulator of Exo-atmosphere Kill Vehicle Based on Reinforcement Learning	Luo, Chenglong*; Xu, Yuannan; Chen, Wanchun; Chen, Zhongyuan; Xu, Xinrui
12:30 - 12:45	3	Faster RCNN-based Refueling Port Detection for the Autonomous Aircraft Ground Refueling System	Kuang, Boyu*; Barnes, Stuart; Tang, Gilbert; jenkins, karl w

14:15 - 14:30	88	Exploring the Application of Transfer Learning in Malware Detection by Fine-tuning Pre-Trained Models on Binary Classification to New Datasets on Multi-class Classification	Ajayi, Bamidele*; Barakat, Basel; McGarry, Ken; Abukeshek, Mays
14:30 - 14:45	114	Privacy-Enhanced One-to-Many Biometric System Using Smart Contracts: A New Framework	Wells, Alec*; Dajnowski, Norbert; Bello, Aminu Usman; Murray, John C; Barakat, Basel
14:45 - 15:00	170	Privacy protection strategies in mobile crowdsensing from the framework perspective	Han, Xiaoyu; Niu, Xiaojing*; Chen, Liling; Qin, Shengfeng
15:00 - 15:15	173	Public Perception and Adoption Approaches for Digital Currencies: Analysing Influencing Factors	Bosua, Amarachukwu P*; Biswas, Mriganka

16:00 - 16:15	120	Computer Vision-enhanced In-situ Surface Topography Measurement with Focus Variation Microscopy for Material Extrusion-based Additive Manufacturing	Yin, Kexin*; lou, shan; Qin, Yuchu; Scott, Paul; Jiang, Jane
16:15 - 16:30	23	Content-Aware Depth-Adaptive Image Restoration	Vargis, Tom Richard*; Ghiasvand, Siavash
16:30 - 16:45	79	OtoFrame: A Software Solution for Keyframe Extraction in Otology Endoscopic Videos	Singh, Jobanpreet; Prince, Mark; Dai, Zhuangzhuang*
16:45 - 17:00	91	A Single Shot Multi-Head Gender, Age, and Landmarks Detection using Shared Convolution Features	Khan, Gulraiz*; Wertheim, Kenneth; Pimblett, Kevin; Ahmed, Waqas
17:00 - 17:15	121	Tackling Visual Illumination Variations in Fall Detection for Healthcare Applications	Ikechukwu, Miracle Chibuike; Wang, Jing*

Room 3	Chair:	Zeng, Wenhan	Manufacturing Systems
Session 1 (C)	Co-chair:	Lou, Shan	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	36		Topology optimization of additive manufactured aluminum alloy milling cutter disc
11:45 - 12:00	75		A shop floor modelling and co-simulation approach for online production progress evaluation
12:00 - 12:15	76		Adjustment Methods for Integrated Maintenance and Operation Plans of Urban Rail Trains
12:15 - 12:30	94		A Review of Scene Understanding in Smart Manufacturing Environments
12:30 - 12:45	102		Laplacian Mesh Smoothing with Bilateral Weight for Characterization of Freeform Surfaces

Room 3	Chair:	Dinmohammadi, Fateme	Deep Learning Applications
Session 2 (C)	Co-chair:	Dai, Chuan	
Time (BST)	Paper ID	Authors	Paper title
14:00 - 14:15	5		A Deep Learning based Software Application for Handwritten Text Recognition
14:15 - 14:30	59		LLM Based Cross Modality Retrieval to Improve Recommendation Performance
14:30 - 14:45	95		Enhancing Subsurface Reservoir Characterisation via Predictive LSTM Model of NPHI
14:45 - 15:00	119		Simple Cross-Attention Mechanism for Multi-modal Emotion Classification
15:00 - 15:15	147		An Investigation of the Impact of Normalization Schemes on GCN Modelling

Room 3	Chair:	Li, Jiguang	Robotics and Autonomous Systems 1
Session 3 (C)	Co-chair:	Yang, Erfu	
Time (BST)	Paper ID	Authors	Paper title
15:45 - 16:00	39		3D Reconstruction of Rail Tracks based on Fusion of RGB and Infrared Sensors
16:00 - 16:15	14		The Comprehensive Review of Vision-based Grasp Estimation and Challenges
16:15 - 16:30	42		Contactless Human Physical Signal Measurement for Collaborative Robotic Using Visible-IR Dual Camera
16:30 - 16:45	49		Developing a 3D-Printed Parallel Manipulator for Enhancing Robotics Education
16:45 - 17:00	54		Advancing Healthcare Through Intelligent Human-Robot Collaboration: Overview, Challenges and Opportunities

17:00 - 17:15	111	Enhancing Learning from Demonstration with DLS-IK and ProMPs	Yang, Shibao*; Liu, Pengcheng; Pears, Nick E.
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Room 4	Chair:	Zhang, Long	Control Engineering 1
Session 1 (D)	Co-chair:	Zhao, Xinyu	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	7	Data-driven system identification and control of home facilities for comfortable, energy cost effective and safe home	Yang, Zhenyi*; Zhang, Long
11:45 - 12:00	18	Field-of-view constrained impact time control guidance considering time-varying velocity	Wang, Peng*; Chen, Wanchun; Chen, Zhongyuan; Hu, Jinchuan
12:00 - 12:15	25	Balancing Control of Low Cost Wheel-leg Robotics for Control and Robotics Education	Yang, Zhenyi*; Zhang, Long
12:15 - 12:30	40	Evaluation of Straightness Errors of Cylindrical Workpiece Using the Minimum Zone Method	Zhao, Xinyu*; Zhao, Zexiang; Xi, Jianpu; Ren, Dongxu
12:30 - 12:45	44	Jamming effect analysis of point-source infrared decoy on infrared spin-scan seeker	Li, Qing; Chen, Wanchun; Chen, Zhongyuan*; Hu, Jinchuan

Room 4	Chair:	Dai, Xuewu	Control Engineering 2
Session 2 (D)	Co-chair:	Yang, Lili	
Time (BST)	Paper ID	Authors	Paper title
14:00 - 14:15	58	Low-Rank Autoregressive Tucker Decomposition for Traffic Data Imputation	Lu, Jiaxin; Gong, Wenwu; Yang, Lili*
14:15 - 14:30	61	Catenary-based Impact Time and Angle Control Guidance	Wang, Nanxiang*; Chen, Wanchun; Chen, Zhongyuan
14:30 - 14:45	64	A Hybrid Controller for Novel Cascaded DC-DC Boost Converters in Residential DC Microgrids	ALHARBI, YOUSEF A*
14:45 - 15:00	78	Towards Greener Rail Transit: Multi-Train Timetable and Speed Profile Optimization for Energy Conservation	Zhang, Yunjia; Cui, Dongliang; Wang, Weiqiang; Sun, Xubin; Yuan, Zhiming; Tian, Zhongbei; Dai, Xuewu*
15:00 - 15:15	93	Active Target Defense Differential Game: An Integrated Guidance and Control Approach	Gong, Xiaopeng; Chen, Wanchun; Chen, Zhongyuan*

Room 4	Chair:	Short, Michael	SS03: Digital Technologies and Tools 1
Session 3 (D)	Co-chair:	Aggarwal, Geetika	
Time (BST)	Paper ID	Authors	Paper title
15:45 - 16:00	55	Integrated Operational Planning For Smart Electric Networks in Middlesbrough, UK	Sabeel, Khurshed*; Aggarwal, Geetika; Short, Michael ; Eslamy, Mahdy
16:00 - 16:15	67	Parallel Implementation of Fuzzy-PID Controllers for Pitch Control of Offshore Wind Turbines	Wattegama, Rajitha Simal*; Aggarwal, Geetika; Dawood, Huda; Eslamy, Mahdy; Charles, Maria Jenisha; Short, Michael
16:15 - 16:30	100	PLC & SCADA BASED AUTOMATION FOR SMART JUICE MANUFACTURING PROCESS	Hanur Dinesh Babu, Subhash*; Aggarwal, Geetika; Short, Michael
16:30 - 16:45	103	Sustainable Manufacturing through Digital Multi-Material 3D Printing	Naveed, Dr*; Anwar, Muhammad Naveed
16:45 - 17:00	128	A Review of the EoL EV Batteries Sorting and Disassembly Challenges	Rehman, Sheikh Ameer*; Short, Michael ; Savage, Rod; Cui, Xinjun; Al-greer, Maher Dr; Emandi, Bhargav; Burn, Adam S
17:00 - 17:15		#N/A	#N/A

Room 5	Chair:	Li, Qingde	SS01: AI and Immersive Technologies 1
Session 1 (E)	Co-chair:	Yu, Hongnian	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	26	Multi-Feature Enhancement and Adaptation for Lightweight Human Behavior Recognition	Kuang, Liqun*
11:45 - 12:00	28	Application of Improved Differential Evolution Algorithm In the Flatness Assessment of Exposure Machine Substrates	Xi, Jianpu*; Nie, zi kai; Deng, Iijuan; Zhang, tongtong; Liu, shicong
12:00 - 12:15	47	Assessment of Inertial Measurement Units for Estimating Kinematic Data in Gait Analysis	Elsheikh, Mohamed; Barakat, Basel*; Ibrahim, Mona Mohamed; Kamel, Ahmed M; Abukeshek, Mays

Room 5	Chair:	Yue, Yong	SS01: AI and Immersive Technologies 2
Session 2 (E)	Co-chair:	Li, Qingde	
Time (BST)	Paper ID	Authors	Paper title
14:00 - 14:15	62	A Dynamic Configuration Design Method Based on Cloud Model and Deep Reinforcement Learning	Li, Rong; zhang, haizhu*
14:15 - 14:30	83	An Improved Harris Hawks Optimization Algorithm for Microservice Composition and Collaborative Optimization	Xu, Yuyao*; Cheng, Lianglun; Wang, Tao; Ni, Mingzhe
14:30 - 14:45	113	GuKang, a Reliable Dataset for Multi-source Chinese Orthopedic Rehabilitation	Song, Zelin*; Xue, Tao; Li, Pinjie; Zhang, Ming; Zhang, Tao

Room 5	Chair:	Barakat, Basel	SS04: Computational Brain Health Research
Session 3 (E)	Co-chair:	Danso, Sam	
Time (BST)	Paper ID	Authors	Paper title
15:45 - 16:00	115	A Wearable AR System for Maintenance in Industry 5.0: Assessing Mental Workload and Usability	Lima Dourado, Igor*; Caires Moreira, Lorena; Kauffman, Marcos; Horan, Ben
16:00 - 16:15	29	Multi-Task Learning with Acoustic Features for Alzheimer's Disease Detection	Sviderski, Marek*; Barakat, Basel; Allen, Becky; MacFarlane, Kate
16:15 - 16:30	73	Exploration of Machine Learning and Deep Learning Architectures for Dementia Risk Prediction Based on ATN Framework	Danso, Sam*; Prattipati, Sindhu

12:15 - 12:30	50	Enhanced LDA with SVM and Ensemble Learning for Advanced ADL Classification Using Smartwatch Data	Ahmed, Mustafa MO*; Yu, Hongnian; Vassallo, Michael; Koufaki, Pelagia
12:30 - 12:45	164	A Hybrid Bayesian-Genetic Approach for Micro Gear Tolerance Optimization	Jin, Jin*; Xu, Yuanping; He, Jia; Zhang, Chaolong; Gai, Qiuyan; Kong, Chao; Guo, Benjun; Xu, Zhijie

14:45 - 15:00	155	Immersive Embodied Telemanipulation System with a Velocity Controller	Wu, Ziniu; Chu, Yijie; Zhu, Xiaohui; Sun, Qilei; Yue, Yong*
15:00 - 15:15	149	A Platform Independent Model Design and Adaptation for Edge Intelligence	Zhang, Chaolong*; Zhou, Jiliu; He, Jia; Xu, Zhijie; Jin, Jin; Kong, Chao; Xu, Yuanping; Guo, Benjun; Gai, Qiuyan

16:30 - 16:45	90	Acoustic Emotion Analysis for Novel Detection of Alzheimer's Dementia	Sviderski, Marek*; Barakat, Basel; Allen, Becky
16:45 - 17:00	104	Exploring Risk Factor Interactions across the Development Stages of Dementia using an Explainable Machine Learning Model	Luo, Zeqi*; Danso, Sam
17:00 - 17:15	158	FASEdenseNet: A Module Embedded Convolutional Neural Network for Scalp EEG based Epilepsy Prediction	Tang, Muran*; Yang, Xiao; Luo, Jiajie; Long, Jianqiao; Li, Jiguang; Li, Jichun

**The 29th International Conference on Automation and Computing
(ICAC 2024)**

Friday, 30th August 2024

Session 4

Session 5

Online / Video session

Room 1	Chair:	Dai, Zhuangzhuang	Smart and Intelligent Systems
Session 4 (A)	Co-chair:	Cao, Faxian	
Time (BST)	Paper ID	Authors	Paper title
10:00 - 10:15	116	Utility of Local Quantized Large Language Models in Semantic Navigation	Elksnis, Arturs*; Xue, Ziheng; Chen, Feng; Wang, Ning
10:15 - 10:30	157	A Novel Approach to Grasping Control of Soft Robotic Grippers based on Digital Twin	Xiang, Tianyi; Li, Borui; Zhang, Quan*; Leach, Mark P; Lim, Eng Gee
10:30 - 10:45	71	Are Microphone Signals Alone Sufficient for TOA Self-Positioning?	Cao, Faxian*; Cheng, Yongqiang; Khan, Adil; Yang, Zhijing; Guo, Zhongwai
10:45 - 11:00	101	Using 2D LiDAR and RGB Camera for Human Agnostic Mapping	Khalid, Fawaz; Pickering, James E; Dai, Zhuangzhuang*

Room 1	Chair:	Zhai, Xiaojun	Artificial Intelligence 4
Session 5 (A)	Co-chair:	Huang, Guoyan	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	172	Accelerate Training of Personalised Multi-Task Federated Learning	Li, Yiren*; Sharma, Pradip K; Leontidis, Georgios; Yi, Dewei
11:45 - 12:00	86	Systolic Array Architecture for Multitasking Neural Processing Unit	Lin, Peidong*; Zhang, Hexu; Li, Lin; Li, Yun
12:00 - 12:15	85	Recommendation Systems with Non-stationary Transformer	Li, Gangmin*; Liu, Yuchen
12:15 - 12:30	125	UAV and AI-Driven Approaches for Accurate Species Classification in Railway Trackside Vegetation Management	Mahbubur Rob Mahid, Mohammed; Brennan, James; Clark, Adrian F; Woods, John; Zhai, Xiaojun*

link:	https://teams.microsoft.com/l/meetup-		
Room 5	Chair:	Si, Weiyong	Video presentation
Session 4 (E)	Co-chair:	Zhang, Qichun	
Time (BST)	Paper ID	Authors	Paper title
10:00 - 10:15	43	AUTONODE: A Neuro-Graphic Self-Learnable Engine for Cognitive GUI Automation	Datta, Arkajit*; Verma, Tushar; Chawla, Rajat; N S, Mukunda; Bhola, Ishaan
10:15 - 10:30	92	A Multi-source Information Fusion Bearing Fault Diagnosis Method Based on PCIDCNN	Chen, Xu*; Chang, Wenbing; Zhou, Shenghan
10:30 - 10:45	112	Trajectory Generation by Sparse Demonstration Learning and Minimum Snap-based Optimization	Xu, Taoying; She, Haoping*; Si, WEIYONG; Li, Chuanjun
10:45 - 11:00	89	Lightweight Imitation Learning Algorithm with Error Recovery for Human Direction Correction	Zhu, Mingchi; She, Haoping*; Si, WEIYONG; Li, Chuanjun
11:00-11:15	20	QueryCLR: a Query-based Contrastive Visual Representation Learning for Echocardiogram Classification	Li, Zhen*; Wang, Hao; Chang, Yingxiu; Qiu, Weijing; Cheng, Yongqiang

Room 2	Chair:	Gu, Fengshou	Prognostics and Health Management 1
Session 4 (B)	Co-chair:	Zeng, Qiang	
Time (BST)	Paper ID	Authors	Paper title
10:00 - 10:15	13	Machine learning model for predictive maintenance of modern manufacturing assets	Shaalán, Abdu A*; Baglee, David; Dixon, Derek
10:15 - 10:30	159	Analysis of Instantaneous Angular Speed Accuracy Considering Encoder Errors	Liu , Yuanhao; Gu, Fengshou ; Zeng, Qiang*

Room 2	Chair:	Gu, Fengshou	Prognostics and Health Management 2
Session 5 (B)	Co-chair:	Zhang, Bing	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	165	Wind Turbine Blade Imbalance Monitoring Using PMSG Electrical Signals	Li, Dongqin*; zou, zhexiang; Cao, Yanling; Zeng, Yang; Gu, Fengshou ; Ball, Andrew
11:45 - 12:00	167	Fault Diagnosis of A Marine Electric Propulsion System Based on Order Tracking Motor Current Signature Analysis	zou, zhexiang*; Chen, Yulin; Liu, Yaoze; Gu, Fengshou ; Ball, Andrew

Room 5	Chair:	Si, Weiyong	Video presentation
Session 4 (E)	Co-chair:	Zhang, Qichun	
11:30-11:45	144	SpeechCraft: An Integrated Data Generation Pipeline From Videos for LLM Finetuning	Modi, Shrey D*; Vishwakarma, Rahul; Arlagadda Narasimharaju, Jyothi Swaroop; mahesh vuppalapati, Venkata sai; Shah, Heer Kirtibhai
11:45-12:00	74	LEAD: Latency-Efficient Application Deployment for Microservices Architecture	Mirzaei, Mohamad ali*; Poorsistani, Parsa; Javadi, Seyyed Ahmad

10:30 - 10:45	160	Clearance condition monitoring of high-speed train axlebox bearings using novel on-rotor sensing technology	Zhou, Zewen; Chen, Bingyan; Feng, Guojin; Shi, Dawei; Gong, Xue; Gu, Fengshou *
10:45 - 11:00	161	Exploring Smart Office Design with Multimodal and Multi-users Interaction for Workers' Well-Being and Productivity	Zhu, Ziwen; Yang, Liying; Qin, Shengfeng*; Ge, Chenyu; Xu, Kai ; Woo, Wai Lok; Dodd, Alyson

12:00 - 12:15	163	Characterising the Orthogonal Outputs of an On-Rotor Sensing Vibration Node for Condition Monitoring of Electric Motors	Shi, Dawei; He, Yinghang; Li, Chun; Wang, Wei; Gu, Fengshou *; Ball, Andrew
12:15 - 12:30		#N/A	#N/A

12:00-12:15	27	AI-powered Thermal Comfort: Predicting Indoor Air Temperature for Efficient HVAC Systems	Zubair, Syed*; Hamayat, Faizan; Nazir, Ahsen
12:15-12:30	124	1D-CNN-IDS: 1D CNN-based Intrusion Detection System for IIoT	ARSLAN, MUHAMMAD; Mubeen, Muhammad; Bilal, Muhammad; Abbasi, Saadullah F*

Room 3	Chair:	Qin, Shengfeng	Robotics and Autonomous Systems 2
Session 4 (C)	Co-chair:	Min, Geyong	
Time (BST)	Paper ID	Authors	Paper title
10:00 - 10:15	117	Integrating Vision and Learning-based Method for Dexterous Grasping	Kadalagere Sampath, Suhas*; Wang, Ning; Wu, Hao; Liu, Cunjia; Jiang, Jingjing; Yang, Chenguang
10:15 - 10:30	148	Understanding of Lift Kite Operation Requirements of a Rotary Kite Wind Turbine	chen, ziwei*; Yue, Hong; Abbas Kazemi Amiri, Mehrad; Morgan, Laurence
10:30 - 10:45	66	A Generative City Digital Twin System for Flooding Emergency Management in Smart City	Ge, Chenyu; Qin, Shengfeng*
10:45 - 11:00	38	Image Encryption Using Dynamic Salt Injection, Hybrid Chaotic Maps, and Dual Operation Substitution	Khattak, Aizaz Ahmad*; Babaagba, Kehinde O; Liu, Xiaodong; Shah, Syed Aziz

Room 3	Chair:	Manzoor, Umar	Robotics and Autonomous Systems 3
Session 5 (C)	Co-chair:	Sun, jie	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	141	A Conceptual Design for a New Collaborative Mapping System using Odometry and IMU Data from a Modular Morphing Tracked Robot	Adams, Rob*; Murray, John C; Manzoor, Umar
11:45 - 12:00	143	Trajectory Tracking and Imitation of Robotic Quadrupeds Using DeepLabCut	Davies, Martin P*; Murray, John C; Manzoor, Umar
12:00 - 12:15	154	Design of Flexible Gripper with Inflatable Palm for Dynamic Grasping Range	wang, jingxiang; Lu, Yangzesheng; song, chengqi; Xu, Bingjie; bu, qinglei*; Sun, jie; Zhang, Quan
12:15 - 12:30	156	An Autonomous Household Robot for Object Detection and Grasping	Lu, Yangzesheng; Xu, Bingjie; wang, jingxiang; bu, qinglei*; Leach, Mark P; Sun, jie

Room 4	Chair:	Aggarwal, Geetika	SS03: Digital Technologies and Tools 2
Session 4 (D)	Co-chair:	Short, Michael	
Time (BST)	Paper ID	Authors	Paper title
10:00 - 10:15	127	Technologies for EoL EV Batteries Recycling: Assessment and Proposals	Short, Michael *; Rehman, Sheikh Ameer; Cui, Xinjun; Al-greer, Maher Dr; Savage, Rod; Emandi, Bhargav; Burn, Adam S

Room 4	Chair:	Yue, Hong	Control Engineering 3
Session 5 (D)	Co-chair:	Yang, Jun	
Time (BST)	Paper ID	Authors	Paper title
11:30 - 11:45	118	Online Process Fault Diagnosis through Integration of Principal Component Analysis, Modified Recurrence Plot, and Convolutional Neural Networks	Dong, Yiran*; Zhang, Jie; O'Malley, Chris

10:15 - 10:30	142	Techno-Economic Evaluation of Hybrid Renewable Energy Systems for Power Supply	Olanrewaju, Ridwan*; Charles, Maria Jenisha; Al-greer, Maher Dr
10:30 - 10:45	146	Optimization of Medium Voltage Distribution Network by Incorporating Additional Loads and Embedded Generation	Olanrewaju, Folashade Juliana*; Charles, Maria Jenisha; Al-greer, Maher Dr
10:45 - 11:00	153	Adaptive change in national markets of electricity as benchmark for microgrids: the case study of Poland and the UK	Wasniewski, Krzysztof*

11:45 - 12:00	133	Advancing Control Paradigms in Heat-Integrated Distillation Columns: An MPC Perspective	Tahir, Nura M*; Zhang, Jie; Armstrong, Matthew
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12:15 - 12:30	134	Impacts of User Behaviour and Social Networks on Residential Energy Savings: A Review	Du, Feng*; Yue, Hong