

**2021 2nd IEEE International Conference on Advances in  
Electrical Engineering and Computer Applications  
(AEECA 2021)**

**Conference Program**



August 27-29, 2021

## **Organization Structure**

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### **Organized by**

International Association of Applied Science and Technology (IAAST)

### **Supported by**

Zhengzhou University

Wuhan Institute of Technology

Institute of Electrical and Electronic Engineers (IEEE)

### **Conference Chair**

Yanling Cai, Associate Professor, Zhengzhou University

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Dr. Lavika Goel, Birla Institute of Technology Science, India

Assoc. Prof. Olga Shabalina, Volgograd State technical University, Russia

Dr. Pooja Singh, Department of Mathematics, VJTI, Mumbai, India

Dr. Bin Xue, National University of Defense Technology, China

## **Publication Chair**

Assistant Prof. Yan Tingchun, Heilongjiang University, China


## Conference Agenda


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### Final Confirm


 Aug 27 09:00-18:00

### Oral Presentation

 Aug 28 08:00-12:00 Session A, B, C  
14:00-18:00 Session D, E, F

 Aug 29 08:00-12:00 Session G, H, I  
14:00-18:00 Session J, K, L

### Poster Presentation

 Start from Aug 28, 08:00 For all posters

<http://www.aeeca.com/program.html>

## **Approaches to Attend Conference**

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### **Oral Session A**

Input conference ID: **473 513 186**

Click conference link: <https://meeting.tencent.com/dm/1OyI9Z4a5iFR>

### **Oral Session B**

Input conference ID: **695 589 633**

Click conference link: <https://meeting.tencent.com/dm/5ZQ2LAFU1wGj>

### **Oral Session C**

Input conference ID: **477 326 532**

Click conference link: <https://meeting.tencent.com/dm/Tqris99DTPhr>

### **Oral Session D**

Input conference ID: **510 829 203**

Click conference link: <https://meeting.tencent.com/dm/4sLdrrCkLFQv>

### **Oral Session E**

Input conference ID: **187 104 972**

Click conference link: <https://meeting.tencent.com/dm/1ROriIFMn1mL>

### **Oral Session F**

Input conference ID: **574 352 093**

Click conference link: <https://meeting.tencent.com/dm/h4E8utWYtukf>

### **Oral Session G**

Input conference ID: **343 953 030**

Click conference link: <https://meeting.tencent.com/dm/F2WU9tqgGppt>

## **Oral Session H**

Input conference ID: **973 805 126**

Click conference link: <https://meeting.tencent.com/dm/uRNvSc1UBZII>

## **Oral Session I**

Input conference ID: **517 221 675**

Click conference link: <https://meeting.tencent.com/dm/n1DbbBwVMVrs>

## **Oral Session J**

Input conference ID: **228 412 791**

Click conference link: <https://meeting.tencent.com/dm/szk5HQqdvIWL>

## **Oral Session K**

Input conference ID: **895 782 170**

Click conference link: <https://meeting.tencent.com/dm/y1P3IRFZHTMw>

## **Oral Session L**

Input conference ID: **818 214 284**

Click conference link: <https://meeting.tencent.com/dm/H3tyZiFVFtFI>

## Arrangement for Oral & Poster Presentation

Session	Code	Title	Author(s)
Oral Session A	EA501	The Effect of Self-Radiation on the Accuracy of Infrared Temperature Measurement	Xia Zhao, Xin Jia, Qufei Shi, Jian Wu, Fang Guo, Xiwen Zhang
	EA503	Application of Neural Network and Kalman Filtering in Sound Source Localization	Yijun Zhang, Zhiyuan Zeng, Dingyong Tang
	EA504	Research on Distribution Network Topology Reconfiguration Based on LSTM Neural Network	Chao Lu, Yitao Liu, Ye Tian, Yannan Wang
	EA508	Imprecise Bayes Analysis of Component Reliability Based on Four-parameter Weibull Distribution	Qiuge Dan, Wei Feng, Jinhui Song, Yunlong Teng, Guoxin Shi, Ding Sun
	EA509	Multi-step Genetic Algorithm for Solving Dynamic Flexible Job Shop Scheduling Problem	Guiying Ning, Dunqian Cao
	EA511	Path Planning of Redundant Manipulator Based on Improved RRT Algorithm	Pengfei Liu
	EA512	Aspect Level Sentiment Classification Based on Viewpoint Information Unit	Yanrong Zhang, Yunxi Xie, Jiayuan Sun
	EA515	Probabilistic Power Flow Calculation Considering the Correlation of Distributed Power Sources	Shaohua Wang, Hongsheng Su, Zhiqiang Zhang
	EA516	Economic Dispatch of Microgrid Incorporating Demand Response Using Dragonfly Algorithm	Bisma Imtiaz, Yuanhui Cui, Imran Zafar
	EA518	Calculation Method of Wind Turbine Off-Grid Probability Based on Continuous-Time Markov Chain	Xinyu Zhang, Hongsheng Su, Yifan Zhao
	EA523	A COVID-19 Prediction Model Based on Neural Network	Xuling Zhang, Hong Yan, Zhen Zhang, Jing Zhang, Rui Zhang, Fuxue Li
	EA525	Research on Maintenance Methods of Power Transmission and Distribution Equipment	Lingming Kong, Junjun Liu, Le Luan, Rui Tong
EA527	A Survey of Transfer Learning Applied in Medical Image Recognition	Huijun Tang, Xueya Cen	

	EA529	Autonomous Localization and Navigation for Transmission Line Inspection of UAV	Jing Wang
	EA531	Evaluation Method of Camouflage Effect Based on Human Visual Attention Mechanism	Qi Jia, Mingxin Liu, Yang Yi, Liyan Zhu
Oral Session B	EA534	Design and Application of Typical Schemes for Cooperative Feeder Self-Healing Control in Distribution Network	Dong Xia, Haiping Yu
	EA535	Data Interaction Method of Virtual Power Plant Participating in Spot Market for Massive Load	Jiantao Liu, Ke Wang, Liwen Wang, Yaping Li
	EA537	Research on Insulation Detection and Fault Location System of Ship Power System	Wei Liu, Kejia Zhang, Yu Gan, Ning Chen
	EA539	A Pseudonym-based Anonymous Routing Mechanism under Multi-controller SDN Architecture	Xiaohan Zhang, Liuzi Zhan, Xiaohui Yao, Qin Qiao
	EA542	Research on Cloud Computing Resource Allocation Based on Particle Swarm Optimization Algorithm	Hua Fu, Yu Fan, Guangxian Pan, Lei Shi, Qian Huang, Yongtao Tian, Chun Xiao
	EA544	Computer Model and Analysis of the Engine Compound Volute	Mu Lin, Weidong He, Lijun Shan
	EA546	The Application of Deep Neural Network in Learning Behavior Prediction of MOOC Learners	Songhua Hu, Xiaofeng Wang, Fawei Zhang, Lei Chang
	EA550	Research on Fault Diagnosis of Ship Power Station Based on Random Forest	Yilong Zhou, Peng Yang, Pengxiang Fang, Ning Chen
	EA552	Control Development of Steam Collection System in High Temperature Kitchen of a Ship Based on PLC	Pengxiang Fang, Ruoxi Ding
	EA555	Design and Implementation of Human Computer Interactive Gesture Recognition System	Peng Qian, Dahao Zhang
EA556	Research on Parallel Distribution Routing Optimization Based on Improved Reinforcement Learning Algorithm	Jun Jiang, Ran Ma, Guicheng Shen	



	EA558	An Improved SPIHT Algorithm for Lossy Image Coding	Baolin Zhou
	EA559	Lightning Overvoltage Simulation Research of Typical 35kV Overhead Lines	Xihan Xie, Xianghai Tao, Shenyang Pang, Yuhui Chen
	EA561	Math Word Problem Solving with Ensemble Learning	Dequan Zheng, Jia Hu, Yunxi Xie, Jingkai Li
	EA562	Influence of Typical Composite Insulator Defects on Axial Electric Field Based on Simulation Analysis	Zhong Xu, Simin Luo, Shuo Xu, Kai Zhou, Heping Peng
Oral Session C	EA563	Operation & Maintenance Analysis and Fault Handling of AC Filter Capacitor in Converter Station	Zhipeng Gu, Weikang Liang
	EA565	Analysis and Control Suggestions of Transient Characteristics of AC/DC Hybrid Power Grid under DC Faults	Adili Balati, Bin Li, Qidi Chen, Dalin Cui, Jianlin Jiang, Dongliang Nan
	EA566	Analysis of Misoperation of Main Transformer Gap Protection in a 220kV Intelligent Substation	Adili Balati, Qidi Chen, Bin Li, Nan Zhang, Dongliang Nan, Xing Wang
	EA568	Design and Key Technology of Coordinate Detection System for Burst Point of Artillery Shells Based on Rotor UAV	Xi'nan Lian, Chen Dong, Chen Kai
	EA569	User Identity Verification Strategy of Virtual Power Plant Node Based on Improved Zero-knowledge Technology	Bo Wang, Xuedong Jiang, Liqin Shi, Zhixiong Zhang, Yong Yan, Qingmin Lyu
	EA571	Application of Lightweight Wire in High Orbit Satellite	Wang Lei, Fu Yu, He Fengping, Zhang Xuan, Li Jian, Liu Peng
	EA575	HVAC Cooling-Heating-Power Demand Strategy Optimization Based on DDPG Control	Jinsong Sang, Hongbin Sun
	EA576	Optimal Allocation of Regional Integrated Energy System Considering Topology Planning	Yi Chen, Chaoqun Wang, Xiaobo Li, Xuedong Jiang

	EA580	A Method of Hot Event Detection Based on Improved TOPSIS	Dezhi Wei, Li'na Lin
	EA582	Research on Wireless Power Distribution Communication Network Planning Method Based on Planning of Energy Consumption Optimizing	Chunying Wang, Xinjian Shu, Zhiyuan An, Lijie Wu, Yan Liu
	EA583	A Multi-Strategy Vision Accurate Inspection Algorithm for Storage Pests	Guicai Wang, Heran Zhao, Dan Wang
	EA584	Research on Integration of Intelligent Distributed Intelligent Housing System Based on OPC Interface Technology	Jiaqi Shen, Huan Tian
	EA586	Research on Key Technology of Indoor Positioning Based on Fusion of Visual Information and Bluetooth Signal	Hongyang Lu, Ya Gao, Lijiao Liu, Yanyun Weng, Jindan Liu, Bei Ning, Liangyu Zhu, Bobo Pang, Congxi Yang
	EA593	Improving Forecasts of the EGARCH Model Using EMD and K-means Clustering	Wei Tian, Yixiang Tian
	EA595	Preparation of Graphene/Manganese Dioxide Supercapacitor Electrode Sheet	Binbin Guan, Xiaoguang Yue, Yunpeng Luan, Yuan Zheng
Oral Session D	EA597	Research Progress of Electrochemical Energy Storage Materials	Li Zheng, Binbin Guan, Xiaoguang Yue
	EA601	Research on a Safety Helmet Detection Method Based on Smart Construction Site	Ying Wang
	EA603	Research of UHV Station Neutral-point Protection of PT's Secondary Winding	Xiang Li, Ping Chen, Lei Wu, Xiaobo Huang
	EA606	Three Types of Robot Flexible Sorting System under Different Scenarios	Wenxue Ran, Haixia Bai, Ruijin Ma
	EA607	Research on the Classification of Dendrobium Images Based on Channel Shuffle	Mingjing Pei, Maosheng Fu, Qian Jiang, Linshan Jiang
	EA611	Computer Search for Non-Isomorphic Min-Trees of Harmonic Index with Given Degree Sequence	Haiyan Wu

	EA613	An Enhanced Strength Pareto Evolutionary Algorithm Based on Reference Direction for Many-Objective Optimization	Yongbin Han, Liling Sun
	EA617	An Axle Counting Simulation System for Rail Transit	Xiaoyu Jiang, Ying Huang
	EA619	Modified Regularized Channel Inversion Based on Minimum Mean-Square Error (MMSE) for Unequal Path Loss	Yanqing Liu
	EA622	An Online Prediction System of Lithium-ion Battery Safety	Hao Feng
	EA624	Research and Application of Chinese Calligraphy Character Recognition Algorithm Based on Image Analysis	Lixia Chen
	EA625	Elements and construction of sports visual image action recognition system based on visual attention analysis	Kun Luo
	EA627	Frame design of sports image analysis system based on fuzzy clustering algorithm	Hong Zhou
	EA628	Research on Digital Image Recognition Algorithm Based on Modular Intelligent Image Recognition	Xiaochen He, Jingyi Shao, Jianguo Zhu
	EA633	Information System Security Protection Based on SDN Technology in Cloud Computing Environment	Huichao Liang, Han Liu, Fangfang Dang, Lijing Yan, Dingding Li
Oral Session E	EA634	Application Analysis of Short-term Statistical Forecast of Macroeconomic Data Based on Data Mining	Yan Liu
	EA636	Research on Discharge Sound Recognition Based on Machine Learning and Convolutional Neural Network Training Algorithm	Yifan Shen, Yuanzhe Liu, Wenhuan Ye, Yiming Zhang, Juncheng Qian, Yuqiao Wang
	EA637	Real time power optimization control of fuel cell hybrid electric vehicle based on fuzzy control	Guizhi Sun, Zhenquan Song, Junhong Xi, Liang Zhu
	EA640	Research on Recycling of Stationery Packaging Based on Image Analysis	Lu Shuai

	EA643	Design of remote monitoring system for new energy vehicles from the perspective of key technologies	Rui Wang, Dengqiang Wang, Lanhong Wang, Yuming Dou
	EA644	Research on Art Design of Exhibition Space Based on 3D Panorama Technology	Jianqiu Fan
	EA645	Optimal Design and Simulation of Structural Parameters of Picking Robot Based on Viewable	Zuyu Zhao, An Yan
	EA649	Design and Implementation of Music Teaching Management System Based on Modern Information Technology	Hao Li
	EA650	Design and Implementation of Enterprise Management Service Platform Based on Fuzzy Clustering Algorithm	Shufang Sun
	EA651	The Development of Financial Science and Technology Based on Matrix Algorithm and the Digital Strategic Transformation of Commercial Banks	Fubo Wang, Yuanyuan Liu
	EA653	Construction of Digital Tourism Scenic Spot in Shenyang Based on Virtual Reality Technology	Jingmei Liu
	EA655	Elements and construction principles of sports visual image system based on hierarchical semantics	Ling Tang
	EA658	Design of photoelectric detection preamplifier circuit based on single chip microcomputer technology	Qingyou Zhu
	EA659	Research on the construction method of photoelectric detection preamplifier circuit combined with single chip microcomputer technology	Xueqin Meng, Hongmei Yuan, Yulin Wang
	EA662	Piano accompaniment features and performance processing based on music feature matching algorithm	Yan Zhao, Xue Liu, Tong Su
Oral Session F	EA665	Application Research of Higher Vocational English Teaching Platform Based on Machine Learning Supported by Information Technology	Na Liu
	EA667	Research on Color Design Principles of UI Interface of Mobile Applications Based on Vision	Guoying Wen

	EA668	Analysis of Influencing Factors of Natural Disaster Risk Based on ANOVA	Zaipeng Duan, Renhua Ai, Yiyang Zhang
	EA669	Temperature Drift Compensation of MEMS Inertial Sensor Based on IA-BP Algorithm	Chenguang Xu
	EA671	Research on Energy Function Optimization Based on Markov Random Model	Shufen Yang
	EA673	Computer Method Research on Risk Control Identification System Based on Deep Learning	Yuankai Liu
	EA675	Improved Mean Shift Algorithm Based on Probability Distribution	Xiaoqin Liu, Xiuhua Zhang, Xiaolong Pei, Xun Yan
	EA679	A mobile robot navigation algorithm and mobile modeling to help people recover from gait	Xueyan Li
	EA680	Method of Improving Positioning Accuracy of Mobile Robot Based on Stereo Camera	Lang Rao, Fenggang Liu
	EA683	Application Analysis of Temperature Data of FY4A Satellite Based on Measured Data	Runlong Fan, Bin Tian, Lidong Sun
	EA685	Design of stage axis controller based on LwIP protocol	Minghui Qiang, Weizhen Li, Yanbin Bai
	EA687	Loss Analysis and Verification of a Discharge Regulator	Xie Wei, Yang Yahong, Dong Baolei, Liu Tao
	EA688	Research on condition monitoring of FDM equipment based on LSTM	Yantong Zhao, Yu Zhang, Wei Wang
	EA689	Multi Scale Feature Fusion Crowd Density Estimation Technology Based on Residual Network	Alin Hou, Hongjian Sun, Lang Wu, Qihao Yang, Peng Ji, Bo Cui, Hongkun Ji
	EA691	Research on Information System Model for Movable Cultural Relics through Blockchain Technology	Yinglan Zhang, Cheng Liu, Zimo Zhu, Yuke Lu
Oral Session G	EA692	FPGA-based image correction algorithm research	Shuang Zhai, Caizhen Zhang, Yaneng Li
	EA695	Research on Computer Large-screen Information System and System Software Operating Mechanism of Gymnasiums	Xi Zheng
	EA696	Neural Network Model Comparison and Analysis of Prediction Methods Using ARIMA and LSTM Models	Hengzhi Wan, Yan Zhou

EA697	Brain Segmentation Based on UNet++ with Weighted Parameters and Convolutional Neural Network	Alin Hou, Lang Wu, Hongjian Sun, Qihao Yang, Hongkun Ji, Bo Cui, Peng Ji
EA698	Real-time Semantic Segmentation Based on Multi-scale Feature Map Joint Pyramid Upsampling	Liang Chao, Wang Xiaoyu, Song Yu, Jiang Changhong
EA700	Automatic camera calibration method based on projective transformation	Shengpeng Fu, Renbo Xia, Jibin Zhao
EA701	Research on the Test Technology of Electronic Countermeasures Equipment Direction Measurement	Wang Baojun, Li Xiongwei, Xing Zheng, Li Hongkai
EA703	Aerodynamic Investigation of a General Aviation Aircraft with Distributed Electric Propulsion	Jin Shi, Jun Zhou, Liaoni Wu
EA705	A research on stock forecasting based on principal component LSTM model	Haoyuan Liu
EA707	A three-dimensional modeling technology for management of the construction process based on scanning with unmanned aerial vehicles	Xu Dong
EA708	Analysis of anti-interference performance of navigation signal based on FH-BOC modulation system	Minshu Zhang, Lixin Zhang, Qibing Xu, Lang Bian
EA709	Visual Design Based on Real-time 2D/3D Mixed Content Display System	Mengshan Yang
EA712	Research on Qualitative Classification Method of Drivers' Driving Style	Zhichao Xing, Xingliang Liu, Rui Fang, Hui Zhang, Zhiguang Liu
EA713	Research and Analysis on Beihai Fishery Optimal Revenue Model Using Barycenter Method under Different Seawater Temperature	Liu Yiming, Jiang Kunyi, Wang Longxin, Xiao Shaowen, Jia Yunsong
EA717	Research and Application of Digital Audio Technology and MIDI Technology in Computer Music Production	Liang Liang, Jie Liu

Oral Session H	EA718	Language Learning in AVG Computer Games: Design Strategies	Baohua Su, Jun Peng
	EA720	Design of Automatic Switch of Charging Rail for Electric Vehicle Dynamic Charging System Based on Wireless Power Transmission	Jie Pang, Zhaopeng Li, Chuyuan Xu
	EA723	Advertisement monitoring system based on C++	Aotian Chen, Tianao Chen
	EA725	Analysis of We-media Marketing Based on Short Video Barrage Data —A Case Study of Hua Nong Brothers	Yan Yixuan, Shao Yiming
	EA726	Evaluation of the anti-jamming performance of SAR based on ELECTRE-III	Junchao Zhao, Qi Zhang, Xin Zhang, Huafeng He, Tao Zhou, Jianfei Zheng
	EA729	The Study of Permanent Magnet Demagnetization in Permanent Magnet Synchronous Motor	Qi Dandan, Jing Yanan, Zhang Shuyang
	EA730	Research on Modular Modeling Method of Vehicle Driveline System	Dongyang Wang, Minghui Hu, Datong Qin
	EA732	Structural response analysis of an underwater robot carrier based on second-order stokes wave action	Huang Jianing, Han Jianggui
	EA733	Digital Currency System and the Effectiveness of Blockchain Verification in Computer Information System Environment	Haiqin Wen
	EA734	Design and Analysis of Star Tracker Bracket Based on Topology Optimization Method	Wang Wei, Li Xiufeng, Han Shaohuan, Liu Hui
	EA737	An Evaluation Method of Training Effectiveness for Navigation Radar Simulation System Based on SVM	Ye Yao, Yian Zhu, Bin Tian, Lian Li, Lixiang Zhang, Chunyu Che, Bin Lian
EA739	Application of Information Diffusion of Negative Emotion and Binomial Regression Method on Retweet Cascades during Covid-19	Xinmiao Zhang, Gan Wang	

	EA741	Failure Analysis on Bursting Disc of 5052 Current Transformer Used in 550kV Substation	Ning Bai, Yongfeng Zhao, Jie Liu, Dong An, Qizheng Yuan, Chang Che
	EA745	Analysis of User Behavior through Network Big Data and Intelligent Information System	Yin Zhou, Fang Fang
	EA749	Implementation of Hololens2-Based Augmented Reality Technology in Non-automated Warehouse Picking	Weiwei Tang, Fuyan Liu
Oral Session I	EA752	Research on Key Technologies of integration of agricultural and rural information service cloud platform	Xie Yaya
	EA753	Design of Music Teaching System Based on Virtual Reality Environment	Wang Liang, Feng Yuan, Ling Ke
	EA756	Study on the Relationship Between Food Security and Agricultural Modernization Based on BP Neural Network	Yu He, Wenkuan Chen
	EA757	Electron-beam physical vapor deposition with decreasing plasma density	Hui Zhao
	EA758	Electron Emission Deposition Coefficient of Physical Vapor Deposition Using Nanometer-Indentation Method	Hui Zhao
	EA760	Optimization Design of Wavefront Control Dimension for Adaptive Optics System of Space Camera	Jiaxing Chen, Xiaoyong Wang, Zhe Lin
	EA765	Construction of University Network Ideological Education Platform Based on Information Technology	Zhi Li
	EA766	Computer Information Processing Technology Based on Data Mining Technology	Yueying Yan
	EA768	Application of Electromechanical Installation Technology of Urban Rail Transit Based on Finite Element	Xiaohong Li, Ke Wang
	EA771	Research on the Application of Computer Technology in Railway Engineering	Chenyu Wu



	EA773	Research on the Correlation between Sci-Tech Investment and Industrial Economic Growth Based on Genetic Algorithm	Haiyan Wu
	EA775	Competency Evaluation System of English Teaching Post based on K-Means Clustering Algorithm	Lian Xue
	EA778	Research on the Construction of High Mathematics Learning Platform Based on Cloud Computing under the Background of Smart Campus	Li Su
	EA779	Research on Data Mining Technology of RMB Exchange Rate Anomaly Based on Structural Equation Model	Ying Wang, Lei Zong
	EA780	Analysis of Dielectric Constant and Fractal Dimension of Porous Dielectric in VLSI Based on Weight Analysis	Yanni Tang
Oral Session J	EA782	Design and Implementation of Distance Music Education Platform Based on Cloud Computing	Xiaoyan Zhang, Yu Yan
	EA786	Exploration of Media Convergence Path Based on Blockchain and Big Data Technology	Nana Liang
	EA787	Research on the Relationship between Brand Color and Recognition Degree Based on Computer Graphics Analysis	Peng Hou
	EA789	Analysis of China's Automobile Marketing System and Automobile Sales Market Structure Model Based on Cloud Computing	Fan Yang
	EA791	A Hybrid Fuzzy Random Forest Algorithm Using Harmonic Search Algorithm for Parameter Tuning	Ying Yu, Feng Yu, Yanru He, Wenwen Yang
	EA792	Research on MBD Process Design of Light Weapons Based on UG	Meng Wang, Shouli Pan, Weiyu Zhang, Yongjie Qu, Shu Wang
	EA793	Delve Deeper of Rule Based Correlation in Multimedia Network	Lei Ao

	EA796	Optimization analysis method for piston rod of an automatic weapon based on secondary development of ABAQUS	Wang Yingsong, Tong Ling, Hu Yanling
	EA798	Simulation Study on Anti-armor and Anti-personnel Composite Warhead	Jia Fei, Yuan Dawei, Yang Zhiyuan
	EA799	Finite element simulation analysis of explosion of a cloud explosive bomb combustor based on ABAQUS	Tong Ling, Pan Shouli, Jia Fei, Wang Shu
	EA800	Improved YOLOv4 Based on Dilated Convolution and Focal Loss	Dong Feng, Mangui Liang, Guangchao Wang
	EA805	Research on Moving Target Capture and Trajectory Reconstruction of Orthogonal Double Vision System	Xingdong Pan, Haiqing Ouyang, Kai Zhu, Hongchen Zhan
	EA806	Detection and Classification of Metal Workpiece Surface Defects Based on Machine Vision	Yibei Huang, Tao Yu, Kai Wan, Jie Yuan
	EA811	Autonomous Docking of the USV using Deep Reinforcement Learning Combine with Observation Enhanced	Wei Wang, Xiangfeng Luo
Oral Session K	EA812	FPGA Realization of Stacked Auto-encoder with Three Fully Connected Layers	Zerun Li, Man Zhu, Yufei Zhu, Sen Yang, Hongfa Shi, Jingfei Jiang, Qinglin Wang, Zuocheng Xing
	EA813	Study on the cooperative output characteristics of PV arrays under load variation	Shuang Qie, Jian Dou, Jizhe Lu, Zhongxing Wu, Yupeng Zhang
	EA817	Area and Delay Optimization of Ternary FPRM Circuit Based on MOAMA Algorithm*	Jiahao Chen, Qiang Fu, Annan Tong
	EA818	Research on Electromagnetic Characteristics of Power Transformer in Distribution Network	Hou Zufeng, Lin Minhong, Chen Jiandian, Qiu Guanxin, Zhang Yong
	EA821	The autoregression and self-supervision model between ECI and GDP	Honggang Wang, Fang Peng, Minnan Wang, Ni Sun

	EA822	A method of soccer's player rating based on machine learning	Wei Yang
	EA825	Ant Colony Implementation on AODV Routing Protocol	Mesmin J. MBYAMM KIKI, Ibrahim IDDI, Haruna YUNUSA
	EA826	Research on Security Detection Technology of IoT Device Based on AFL	Jingjian He, Yingying Liu, Jianchu Xiao, Yuhang Shen
	EA829	An Intelligent Question Answering Method Combining Knowledge Graph and Corpus	Xiaochen Wang, Qinlin Jia, Hui Du
	EA830	Enhance gated graph neural network with syntactic for sentiment analysis	Liyue Niu, Qiusheng Zheng, Long Zhang
	EA831	Research on the algorithm of organ segmentation in chest X-ray images	Yu Lyu, Xiao-Lin Tian
	EA833	Deep neural network localization algorithm based on GA optimization K-means	Zhijian Qu, Chang Liu, Hanxin Liu
	EA834	Research on fusion navigation of mobile robots based on map and no map	Kang An, Junjie Li, Qing Zhou
	EA837	The Non-uniform Constellation Optimization Design of MQAM Modulation Based on Lion Swarm Optimization	Jichao Cha, Mingyan Jiang, Shengwei Dong
Oral Session L	EA839	Simulation study of Sobel operator and machine learning algorithm in hazard identification and detection in public places*	Shuai Wu, Jianyi Liu, Xiuzhang Yang, Huan Xia
	EA841	Wideband Modeling of High Coupled Split Reactor for Fault Current Limiter	Yong Wang, Ming Xu, Zhao Yuan, Junxiang Liu, Kaijian Wu, Xiancong Zhang
	EA842	Research on Axis Misalignment Auto-Calibration of Rotary INS/CNS Integrated System	Kai Wang, Wangyang Zhao, Xingling Wang, Yuanming Wang
	EA845	Discussion on Fault Clear Strategies for Multi-Terminal UHVDC Transmission System	Li Jie, Yang Jianming, Kong Fei, Ding Xiaobing, Zhang Chi, Zhang Jianfeng

	EA846	Numerical Simulation of Interior Ballistics of Surface-to-Air Missile's Vertical Ejection Device Based on MATLAB	Hanchao Liu, Xuezhi Wang
	EA850	Research on Vehicle OTA Upgrade Technology Based on BSDIFF Difference Algorithm	Yunhui Jia, Xuebin Shao, Shimeng Wang, Ruiqing Zhai, Qi Li, Yueyou Wang
	EA851	A Dendritic Neuron Model for Disease Prediction	Weixiang Xu, Cunhua Li, Dongbao Jia, Yang Cao, Zihao Dong, Mengnan Zhang, Yijun Bai, Rongsheng Zhu, Xiaoke Tang, Yuxiang Dou
	EA853	Research and Application: Analysis Method of the Civil Aircraft Flight Crew Operation Procedure Elements	Yi Hu, Shupe He, Xianchao Ma
	EA856	Research on Energy Efficiency Optimization of Device-to-Device Network Based on Blockchain	Min Wang, Qiaoyun Sun, Shuguang Zhang, Yu Zhang
	EA859	Identification of Topology Change in Low Voltage Distribution Network Based on Electrical Characteristics Analysis	Jingming Zhao, Yongzhi Cai, Wenchong Guo, Jian Li
	EA865	Research on Grid Power Quality Control Strategy Based on Energy Storage Capacity	Mao Xun, Wang Zhen, Guo Li, Zhan Yong
	EA869	Research on Asphalt Pavement Inspection Data Quality Evaluation System	Jian Hu, Yang Chen, Jianping Huang
	EA870	Comprehensive Evaluation Research on Maturity Model of New Intelligent Power Consumption Technology Based on AHP	Zhang Yue, Tang Lize, Zeng Qingbin
	EA871	A Two-level Optimized Genetic Algorithm for Adaptive Warning	Lili Dong, Yueguo Zhang, Xinghao Jiang
Poster Session 1	EA507	The Verification Method of Low Voltage Station Topology Recognition Based on DTW Algorithm	Weiting Zhu, Ye Tian, Haiping Yu, Yitao Liu, Yanan Wang, Kun Zhang
	EA510	Stochastic Degradation Model and Preventive Maintenance Decision of Wind Turbines	Yifan Zhao, Hongsheng Su, Xinyu Zhang

	EA513	Transferability of Structure Parameters and Features in Convolutional Neural Network Layers	Xinhuan Luo
	EA520	A Scheme and Implementation of Automatic Deployment of Multilingual Industrial Mechanism Model Based on OpenStack	Congcong Zhang, Erxin Sun, Xu Cheng, Dandan Zang, Zongjuan Chen
	EA526	Gait Analysis and Realization of Quadruped Bionic Robot with 8 Degrees of Freedom	Xiaokui Sang, Gang Du, Haoyu Wu, Dongxia Zhang
	EA533	Step Density Modulation for Wireless Power Transfer Systems	Jiaqi Tang, Tuopu Na, Tengfei Hu, Qianfan Zhang
	EA540	Exploring the Spatiotemporal Pattern of Urban Human Flows From the Perspective of Dynamic Network	Shaojun Liu, Mianhao Xu, Yao Long
	EA551	Development of a Ship Path Planning Simulator Based on Electronic Chart	Ning Chen, Yu Gan, Kejia Zhang, Wei Liu
	EA560	Dynamic Simulation of DC Breakdown of LDPE Nanocomposite under Thermal Oxygen Aging	Ruixi Kong, Changhai Sun, Baitong Chen
	EA564	Digital Museum for Traditional Culture Showcase and Interactive Experience Based on Virtual Reality	Lingyi Wu, Wei Su, Shishu Ye, Riji Yu
	EA573	Research on Complex Power Quality Disturbance Identification and Classification Technology	Jianwen Li, Zhen Dai, Gang Qin
Poster Session 2	EA578	The Construction of Agricultural Big Data Ecosystem Based on "Internet +"	Xia Song, Qi Meng, Ziqing Huang
	EA579	Three-Dimensional Target Location System for Large Scene	Xuefang Chen, Bifu Li, Xiaofang Zhao, Li Yu
	EA594	Research on Auxiliary Diagnosis Technology of Chronic Disease Based on Case-Based Reasoning	Lin Zhang, Ping Qi, Hao Zhang
	EA599	Constraint Optimization of Centrifugal Pump Particle Swarm Optimization Algorithm	Cheng Chen, Hua Sun
	EA602	Base on New Feature of UHV Converter Substation Control and Protection Study	Xiaobo Huang, Ping Chen, Xiang Li
	EA605	Research and Implementation of Material Distribution Method Based on Intelligent Perception Network	Huichao Shi, Li Niu, Jinhao Sun, Xuemeng Zhang

	EA610	Analysis of Electro Explosive Performance of Al/MoO <sub>3</sub> Bridge Wire Initiating Explosive Devices with Different Modulation Ratio	Pengyang Dang, Jiang Liu, Debin Ni, Shixin Zhang
	EA616	Integrating NiCr-based Thin Film Micro-heater onto Electrode Header: A Review and Perspectives	Wenxing Kan, Enyi Chu, Wei Ren, Lan Liu, Wei Liu
	EA620	Generation of DNA Strands Representing Handwritten Numbers Based on GAN	Jiaqi Dong
	EA629	Network computer security and protection measures based on information security risk in cloud computing environment	Dingding Li, Lijing Yan, Yifan Song, Shuai Li, Huichao Liang
	EA630	Research on Computer Network Security Protection System Based on Level Protection in Cloud Computing Environment	Shuai Li, Fangfang Dang, Ying Yang, Han Liu, Yifan Song
Poster Session 3	EA639	Application and Research of Computer Mega Data Based on Structure in E-learning	Haimei Liu, Jun Li
	EA642	Research and design of face and expression recognition system based on convolutional neural network	Yu Fan, Yiyue Luo, Xianjun Chen
	EA646	Analysis on the Function of Database Construction of Economic Management Specialty Based on Cloud Computing	Xuebin Liu, Hangying Wang, Xu Li, Ling Lin
	EA652	Research on Strategy of Foreign Trade Integrated Service Platform Based on Feature Matching Algorithm	Yuanyuan Liu, Fubo Wang
	EA657	Research on Risk and Supervision of Financial Big Data Application Based on Cloud Computing	Haoguang Wang
	EA661	Analysis of Virtual Characteristics of Movie and TV Animation Art Based on Multimedia Technology	Meiyang Han
	EA666	Analysis of Human Resource Management Mode and Its Selection Factors Based on Clustering Algorithm	Yuzhong Liu

	EA670	Research on finite element simulation of intermediate support of vertical screw conveyor	Lei Mei, Chuang Cheng, Ziqiang Fan
	EA674	Optimization of ventilation and heat dispersion for split type of indoor transformer	Chen Wei, Hu Sheng, Tang Qi, Xie Yin'e
	EA677	Fire Hose Automatic Cleaning and Drying Machine Design and Analysis	Xiangyi Meng, Kaiyue Fu, Yanqiu Liu, Xueheng Tao
	EA681	Application of virtual panorama technology based on multi-source information fusion in high quality development of the Yellow River	Tiecheng Shan, Anni Zhang, Qian Wang, Renpeng Xing, Zhaoxia Xu
Poster Session 4	EA686	Research on Improving the Accuracy of Radio Frequency Control of Robot System	Jiangping Nan
	EA690	Study on stability of stochastic switched fuzzy systems based on novel integrated controllers	Hong Yang, Chao Yang, Yu Zhang, Le Zhang
	EA694	Evaluation of Contribution Rate of Armaments to System-of-Systems Based on Complex Network and Improved Information Entropy	Binbin Hua, Zhaojun Fan, Chao Lin, Zhisong Wang, Yunda Zang
	EA699	Research of Online Course Quality Evaluation System by AHP Entropy Algorithm and Weight Coefficient	Baohua Su
	EA704	Research Progress of Tongue Image Segmentation through Artificial Intelligence and Deep Learning	Ruiyang Peng, Yichi Li, Yingying Rui, Qiyuan Zhang, Xinyue Song, Ziyue Ma, Xiangyong Kong
	EA710	Improvement and Application of Deep Belief Network Based on Sparrow Search Algorithm	Shujuan Xie, Lei Li
	EA721	Application of wireless sensor network in ship control system	Jiang Rifan, Yan Pitao
	EA728	Design of Information System Using Visual Studio for Auxiliary Sports under Computer Big Data	Changchun Lu
	EA736	Design and Research on Miniaturization and Lightness Servo Motor Controller	Fudao Sun, Jian Luo
	EA750	Development of physical education resources and design of college physical education teaching system from the perspective of data fusion	Yang Junwa

	EA759	A High Q and High Coupling SAW Resonator on Multilayer Polyimide Substrate	Zhenxuan Huo, Tianjun Liu, Tiannian Li, Xiaobin Wu, Jie Hu, Xiaode Zhang, Hui Zhong
Poster Session 5	EA769	Development of Financial Technology and Digital Strategic Transformation of Commercial Banks Based on Matrix Algorithm	Xiaoyi Wang, Xiaojie Ren
	EA776	Research on Cost Control of Green Building Construction Project Based on Clustering Algorithm	Yizhi Yang
	EA785	Research on Web Visual Communication Design Based on Feature Extraction Algorithm	Guoli Zhou
	EA790	E-commerce Supplier Evaluation Model Based on Particle Swarm Optimization Neural Network and Its Application	Wei Sun
	EA802	In-situ automatic measuring device for ammonia volatilization in farmland	Ying He, Kun You, Liming Wang, Hongbin Li, Dongqi Yu, Boen Lei, Wangchun Zhang, Boqiang Fan, Wenliang Yang, Anning Zhu, Yujun Zhang
	EA808	Real-time detection of the broken thread of textile products	Yiming Chen, Tao Yu, Kai Wan, Jie Yuan
	EA819	Data-driven Drill Bit Selection for Bored Piles	Chengxi Zhang, Rui Wang, Junhe Yu, Hongfei Zhan
	EA823	A Binary Relation Base Reduction in a Relation Decision System	Xu Li, Jianghua Wang, Chunling Wu, Jianguo Tang
	EA828	Research on fault analysis expert system of a weapon control system	Xuerong Wu
	EA840	Design and Simulation of Electromagnetic Wide-range Current Transformer	Bing Lu, Xiwen Chen, Jun Zhang, Xu Wang, Can Ding
EA866	Node Sensitivity Analysis Method for Power Quality Control of High Proportion Distributed Photovoltaic Access Distribution Network	Zhou Lei, Wang Feng, Li Xutao, Liu Min, Zhang Hanhua	