Technical Program for CSPS 2021, CHINAAI 2021, Tianjin, China			
The 10th International Conference on Communications, Signal Processing, and Systems (CSPS) The 3rd International Conference on Artificial Intelligence in China (CHINAAI)			
August 21st 2021			
August 21st, 2021 Technical Session 8:30-13:30	**Session Chair: Jiasong Mu Join Tencent Meeting Meeting ID: 947844904 Password: 2021**		**Session I : Communication and Networks**
	Session Chair: Liang Han Join Tencent Meeting Meeting ID: 957173432 Password: 2021		**Session II : Signal Processing and Systems**
	Session Chair: Xiaoming Ding Join Tencent Meeting Meeting ID: 176297927 Password: 2021		**Session III : Sensors and Systems**
	Session Chair: Bo Zhang Join Tencent Meeting Meeting ID: 241247887 Password: 2021		**Session IV : Artificial Intelligence and Machine Learning I**
13:30-15:00	**Break**		
August 21st, 2021 15:00-18:15	**Join Zoom Meeting：https://us02web.zoom.us/j/87480721005?pwd=MFhjbW81dnF1aktIbUl1bmltd1FiUT09 Meeting ID: 874 8072 1005 Password: 202108**		
	Opening Remarks	15:00-15:15	**By Prof. Durrani, University of Strathclyde, UK**
	Keynote I Keynote chair: Tariq S. Durrani	15:15-16:00	**" Some observations to the recent progress of AI " -- by Prof. Gong Ke, the Chairman of the Academic Committee of Nankai University, China.**
	Keynote II Keynote chair: Liang Jing	16:00-16:45	**" Toward Native Intelligence in 6G Networks: A Paradigm Changing for Future Networking Architectures " -- by Prof. Zhang Honggang, College of Information Science & Electronic Engineering, Zhejiang University, China.**
	Keynote III Keynote chair: Liu Xin	16:45-17:30	**" Data-poisoning Attacks Threat in Semi-supervised Learning " -- by Prof. Li Shenghong, Tenured Full Professor in Shanghai Jiao Tong University, Shanghai, China.**
	Keynote IV Keynote chair: Wang Wei	17:30-18:15	**" Brain Computer Interface technology: Recent Progress and Challenges " -- by Dr. Jia Jianguo, Previous expert of Huawei technology (Retired at March 2021), Shanghai, China.**
August 22nd, 2021			
August 22nd, 2021 Technical Session 8:30-12:30	**Session Chair: Jiasong Mu Join Tencent Meeting Meeting ID: 648453248 Password: 2021**		**Session V : Artificial Intelligence and Machine Learning II**
	Session Chair: Liang Han Join Tencent Meeting Meeting ID: 196562670 Password: 2021		**Session VI : Communications and Signal Processing**
	Session Chair: Xiaoming Ding Join Tencent Meeting Meeting ID: 207601242 Password: 2021		**Session VII : System and Network**
	Session Chair: Bo Zhang Join Tencent Meeting Meeting ID: 611621067 Password: 2021		**Session VIII : Artificial Intelligence and Machine Learning III**

Session I : Communication and Networks				
Date: August 21st, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42		3	Algorithm for placement of wireless network devices for wide areas with variable soil moisture	Alexander Denisov,Ekaterina Cherskikh
8:42-8:54		10	Design of a Multi-channel Spectrum Perception Performance Verification Model	Bo Zhou, Tong-Qiao Xu, Hong-Wei Cai, Zhao-Yang Li, Chun-Guang Shi and Zhen Chen
8:54-9:06		11	SDN、 big data and AI technologies Design and Implementation of the Network of Intelligent CloudCampus	Tong-Qiao Xu, Bo Zhou, Chen-Zhi Xu and Zhao-Yang Li
9:06-9:18		12	Sum Rate Maximization for 6G IoT Resource Allocation: A Matching Approach	Peng Qin, Yiying Zhu, Xiongwen Zhao and Jiayan Liu
9:18-9:30		24	Investigation on coherent receiving technology in repeaterless transmission system	Yichao Zhang, Yupeng Li, Liang Han, Xiaoming Ding and Xiaocheng Wang
9:30-9:42		29	Data Augmentation for Communication Emitter Identification Using Generative Adversarial Nets	Jianwei Tian, Xu Zhang, Hongyu Zhu, Gang Yue and Zhuo Sun
9:42-9:54		30	Antenna Array Pattern Synthesis based on a Hybrid Particle Swarm Optimization and Genetic Algorithm	Hongming Hu, Lulu Zhao, Peng Gao, Guang Liang and Huawang Li
9:54-10:06		51	Channel Estimation and Refinement Via Equalization in FBMC Systems	Baobing Wang, Jinpeng Xiao, Tian Xiang, Qian Wang, Dejin Kong and Jianzhong Guo
10:06-10:18		53	DMRS-based Channel Estimation Methods for Two-Port OFDM Systems in 5G Uplink	Jun Sun, Tian Xiang, Xiaomin Mu, Jinpeng Xiao, Baobing Wang, Qian Wang, Dejin Kong and Jianzhong Guo
10:18-10:30		54	Research on Epidemic Data Sharing Model Based on Cross-chain Mechanism	Chang Liu and Yu Mei
10:30-10:42		55	An Efficient Precoding Design for Massive MIMO Systems Under Channel Impairments	Huayu Wang, Jing Lv, Yuxing Zhang, Qin Ren and Yinghui Zhang
10:42-10:54		58	Design of Rate Compatible Spatially Coupled LDPC Codes	Yang Liu, Shuangyi Cheng, Bin Wang and Xing He
10:54-11:06	**CSPS**	67	Intelligent Water and Fertilizer System Based on NB-IoT	Zhifeng Jia and Peidong Zhuang
11:06-11:18		68	Deep Reinforcement Learning for Multi-user Resource Allocation of Wireless Body Area Network	Xiuzhi Xu, Jiasong Mu and Tiantian Zhang
11:18-11:30		86	Optimization Technology of Concurrent Routing Transmission in FANET	Guang Yang, Lin Ma, Liang Ye and Danyang Qin
11:30-11:42		90	Development of Copper Indium Gallium Selenide (CIGS) /Perovskite Laminated Thin Film Solar Cell System and Prospect for Its Typical Application	Yanli Sun, Changbo Lu, Xudong Wang and Xudong Xiao
11:42-11:54		94	Research on Power Conversion Efficiency of Laser Wireless Power Transmission System	Wanli Xu, Weigui Zhou, Wei Zhang, Shizhan Li and Changfu Wang
11:54-12:06		95	Synchronization of complex-valued SICNNs with distributed delays via a module-phase-type controller	Qiuyuan Chen, Honghua Bin, Zhenkun Huang and Chao Chen
12:06-12:18		100	Review of Bias Point Stabilization Methods for MZ Modulator	Mingzhu Zhang, Yupeng Li, Shuangxi Sun, Liang Han, Xiaoming Ding and Xiaocheng Wang
12:18-12:30		101	Research on Wireless Charging Queues Optimization Method of UAV Swarm	Changfu Wang, Yaohui Wang, Bin Zhang, Mengyi Wang and Xudong Wang
12:30-12:42		102	Throughput Analysis of Slotted Aloha with Retransmission Limit in Fading channels	Peng Li, Yitong Li, Wen Zhan, Pei Liu, Yue Zhang, Dejin Kong and Kehao Wang
12:42-12:54		103	Optimization of NB-IoT Uplink Resource Allocation via DDQN	Han Zhong, Runzhou Zhang, Fan Jin and Lei Ning
12:54-13:06		109	Transmission optimization for mobile scenarios in 5G NB-IoT Networks	Tongyi Zheng, Qingsong Ye, Runzhou Zhang, Fan Jin and Lei Ning
13:06-13:18		112	Channel Estimation Based on Matrix Completion for mmWave Massive MIMO System	Zhuangzhuang Guo and Weixia Zou
13:18-13:30		127	A Summary Of 5G WiFi Security Issues	Zhuohan Cui, Zheng Li, Enfei Liu and Xiaoxi Ai

Session II : Signal Processing and Systems				
Date: August 21st, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CSPS**	27	Robust Widely Linear Beamforming based on Worst Case Optimization	Jiashuo Yang, Lulu Zhao, Xinglong Jiang, Guang Liang and Jinpei Yu
8:42-8:54		34	An improved stereo matching algorithm based on AnyNet	Haifeng Tang, Shubin Wang and Zehua Wang
8:54-9:06		35	Research on anti-noise activation function based on LIF biological neuron model	Fengxia Li, Shubin Wang and Yajing Kang
9:06-9:18		41	Survey of UAV Path Planning based on Swarm Intelligence Optimization	Zhongwang Zhang, Sheng Liu, Jianqi Zhou, Yongtao Yin, Hanbo Jia and Lin Ma
9:18-9:30		45	Tianlian Satellite Assisted the Remote-sensing Constellation Achieves Download Quickly of Emergency Remotely Sensed Data	Gaosai Liu, Huawang Li, Xinglong Jiang, Guang Liang and Long Wang
9:30-9:42		59	Sensor Path Planning For Target Tracking	Xiafei Huang and Jing Liang
9:42-9:54		61	Correlation Between Hail Diameter and VILD in Bayannur	Yunong Xu, Debin Su, Ning Yang, Xiaoguang Sun and Haijiang Wang
9:54-10:06		66	A Descriptor System Approach to Fault Estimation and Compensation for T-S Fuzzy Discrete-Time Systems	Yu Chen, Xiaodan Zhu and Qian Sun
10:06-10:18		71	Observer-Based Fault Estimation for Discrete T-S Fuzzy Systems	Yu Chen, Xiaodan Zhu, Weifang Yan and Dandan Han
10:18-10:30		79	Cooperative Routing Algorithm Based on Data Priority	Tiantian Zhang, Jiasong Mu and Xiuzhi Xu
10:30-10:42		81	Study of FlexRay bus test methods	Ruina Zhao, Linghui Zhang, Shao Li, Ming Gao and Weizheng An
10:42-10:54		104	Study on Application of Wireless Sensor Network for Spacecraft	Yukun Chen,Guiming Zeng,Jinlong Li,Jiankang Wang and Feng Qiu
10:54-11:06		115	Research on Multi-modal Sensor Data Acquisition and Processing System for USV	Lin Cao, Hao Gao, Junhe Wan, Hui Li, Jian Yuan and Hailin Liu
11:06-11:18		122	Automatic generation method of temporal fault tree based on AltaRica3.0	Qin Zhang, Lisong Wang and Jun Hu
11:18-11:30		126	A Framework for System Safety Modelling and Simulation based on AltaRica 3.0	Jun Hu, Jian Qi, Lisong Wang, Yanhong Dong, Qingfan Gu and Hao Rong
11:30-11:42		129	Target Detection and Recognition System based on PYNQ Platform	Youzhong Wang and Yanping Zhu
11:42-11:54		138	Superpixel Based Sea Ice Segmentation with High-Resolution Optical Images: Analysis and Evaluation	Siyuan Chen, Yijun Yan, Jinchang Ren, Byongjun Hwang, Stephen Marshall and Tariq Durrani
11:54-12:06		144	biased-Infinity Laplacian Applied to Depth Completion using a Balanced Anisotropic Metric	Vanel Lazcano, Felipe Calderero and Coloma Ballester

Session III : Sensors and Systems				
Date: August 21st, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CSPS**	6	Power grid industrial control system traffic classification based on two-dimensional convolutional neural network	Gang Yue,Zhuo Sun,Jianwen Tian,Hongyu Zhu,Bo Zhang
8:42-8:54		9	Design of Remote Indoor Environment Monitoring System Based on STM32	Zhifeng Jia, Peidong Zhuang and Zhenzhen Huang
8:54-9:06		23	The Design of a Household Intelligent Medicine Box Based on the Internet of Things	Long Zhang and Peidong Zhuang
9:06-9:18		32	Study on Digital High Resolution APD Measurement Receiver	Hao Gao, Lin Cao, Enxiao Liu and Lei Yang
9:18-9:30		33	Wireless sensor network coverage optimization based on sparrow search algorithm	Zehua Wang, Shubin Wang and Haifeng Tang
9:30-9:42		46	Image Filtering and Edge Detection System Based on FPGA	Xiaodong Sun and Wang Zhiqiang
9:42-9:54		48	Intelligent Waveform Optimization for Target Tracking in Radar Sensor Networks	Zihan Luo, Jing Liang and Zekai Xu
9:54-10:06		50	Sense-Through-Foliage Target Detection Based on Stacked Autoencoder and UWB Radar Sensor Networks	Chengchen Mao and Qilian Liang
10:06-10:18		52	Study on the Impact of Virtual AtoN Setting on AIS in Harbour Areas	Weiyun Li, Chang Liu, Jinhao Li and Xiaoyan Ji
10:18-10:30		56	Radar Adaptive Interference Suppression Algorithm Based on MVDR	Yumeng Zhang, Jinliang Dong, Gan Wang, Lei Bian and Huifang Dong
10:30-10:42		57	Research on Overall Design of Mobile Phased Araay Radar for Field Vechile	Jinliang Dong, Yumeng Zhang, Gan Wang, Lei Bian and Huifang Dong
10:42-10:54		60	Noncontact Heartbeat Extraction using UWB Impulse Radar	Fangfei Jing, Xiaoqing Tian and Jing Liang
10:54-11:06		62	A Method for Damage Assessment of Orbital Targets Based on Radar Detection Information	Zhengtao Zhang, Qiang Huang and Jiangguo Yu
11:06-11:18		64	Design and Simulation of an Anti-collapse CMUT Structure	Jiajun Liu, Benxian Peng and Fengqi Yu
11:18-11:30		76	Estimation of chlorophyll concentration for environment monitoring in Scottish marine water	Yijun Yan, Yixin Zhang, Jinchang Ren, Madjid Hadjal, David Mckee, Fu-Jen Kao and Tariq Durrani
11:30-11:42		77	Study on tunable Frequency Selective Surface Technique	Yixiu Hao, Tianyu Liu, Yitong Xie, Bo Zhang, Hui Guo, Menglin Li, Rui Li and Chen Liang
11:42-11:54		82	Three-Dimensional Measurement Method for Tube's Endpoints Based on Multi-View Stereovision	Xiaoyu Hou, Mingzhou Li, Qi Lv, Jiang Zheng and Jian Wang
11:54-12:06		96	Evaluation System and Data Analysis Method of Low-Temperature Cold Start for Hydraulic Winch Oil	Xudong Wang, Hua Li, Junbiao Hu, Shizhan Li, Weihua Zhang and Yao Nie
12:06-12:18		97	Primary Battery Electrical Performance Data Collection and Analysis	Chunhua Xiong, Lei Xu, Weishan Wang, Hui Sun，Weigui Zhou，Bingchu Wang and Wanli Xu
12:18-12:30		98	Study of the Volt-ampere Characteristic of Thin Film Solar Cells at Different Incident Angles	Hua Li, Yanli Sun, Junbiao Hu, Hui Sun，Changbo Lu，Bingchu Wang and Wanli Xu
12:30-12:42		99	Metal-air Battery System Design and Electrical Performance Analysis	Lei Xu, Weigui Zhou, Xuhui Wang, Hui Sun，Yaohui Wang，Bingchu Wang and Wanli Xu
12:42-12:54		106	Research on Low Temperature Discharge Characteristics of Ternary Lithium Batteries for Unmanned Systems	Weihua Zhang, Yaohui Wang, Weishan Wang, Lijie Zhou and Wanli Xu
12:54-13:06		124	A Simulation Framework for VRM Requirement Model	Wanli Zhan, Jun Hu, Lisong Wang and Jiarun Lv
13:06-13:18		145	A Study on the Effects of Temperature Changes on the Rheological Properties of Lithium Lubricating Grease and Data Processing	Weigui Zhou, Long Huang, Changfu Wang, Weihua Zhang, Jinmao Chen, Xudong Wang, Youjie Zhou and Jing Wang

Session IV : Artificial Intelligence and Machine Learning I				
Date: August 21st, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CSPS**	7	Influence of Structure Information for Cross-domain Person Re-identification	Nuoran Wang,Cuiping Zhang,Shijie Lv,Yiming Luo,Xin Ding,Shuang Liu,Zhong Zhang
8:42-8:54		8	Course Quality Evaluation based on Deep Neural Network	Moxuan Xu, Nuoran Wang, Haijia Zhang, Zhong Zhang and Shuang Liu
8:54-9:06		14	Research on UAV Human Tracking Method Based on Vision	Xiaodong Sun, Zhiqiang Wang and Yao Zhang
9:06-9:18		15	Cloud Type Classification using Multi-modal Information based on Multi-task Learning	Yaxiu Zhang, Jiazu Xie, Di He, Qing Dong, Jiafeng Zhang, Zhong Zhang and Shuang Liu
9:18-9:30		40	Imbalanced Data Classification of Pathological Speech Using PCA, SMOTE, and Expectation Maximization	Camille Dingam, Xueying Zhang, Shufei Duan, Haifeng Li and Xiaoyu Chen
9:30-9:42		44	Research on Semantic Object Measurement Algorithm Based on Object Detection	Wanqing Wu, Lin Ma, Bin Wang and Zhongwang Zhang
9:42-9:54		63	Speech emotion recognition based on Henan dialect	Zichen Cheng, Yan Li, Mengfei Jiu and Jiangwei Ge
9:54-10:06		69	Financial Risk Prediction Based on Stochastic Block and Cox Proportional Hazards Models	Xiaokun Sun, Jieru Yang, Junya Yao, Qian Sun, Yong Su, Hengpeng Xu and Jun Wang
10:06-10:18		70	Learning Residents' Consumption Structures Based on the ELES Model	Zhenkuan Jiang, Zixiao Wang, Xuan Liu, Kun Liu, Yong Su, Hengpeng Xu and Jun Wang
10:18-10:30		83	Deep Image Classification Model Based on Dual-branch	Haoyu Chen, Qi Lv, Wei Zhou, Jiang Zheng and Jian Wang
10:30-10:42		84	Surface Defect Detection System of condenser Tube Based on Deep Learning	Siyu Chen, Qi Lv, Yuzhe Zhang, Jian Wang and Jiang Zheng
10:42-10:54		85	Keywords clustering for the interview texts based on Kmeans algorithm	Xu Gao,Xiaoming Ding,Wei Wang,Guangming Wang,Yueyuan Kang,Shaofang Wang
10:54-11:06		89	The Time Series Data Classification Method Based on Deep Spatial Transformer Network	Demeng Hu, Bo Hu, Zhao Li and Fangmin Xu
11:06-11:18		91	Subsequent Work of the Anomaly Detection and Fault Determination Engineering Framework: An IMA core processing oriented Safety Assessment Approach based on the Dynamic Fault Tree	Yang Hong, Lisong Wang, Jiexiang Kang, Hui Wang, Zhongjie Gao, Rui Zhang and Qin Zhang
11:18-11:30		110	Fall recognition based on human skeleton in video	Hongwei Liu and Jiasong Mu
11:30-11:42		111	Automatic Localization of Multi-type Barcodes in High-Resolution Images	Yuanbiao Xiao, Jinwang Yi and Guanhao Qiao
11:42-11:54		116	An improved filtering method of superfluous relationship in domain model based on random forest	Mengyuan Yu and Lisong Wang
11:54-12:06		117	Hidden Markov Model and its Application in Human Activity Recognition and Fall Detection: A Review	Tingting Xue and Hui Liu
12:06-12:18		134	Joint CSI Acquisition Based on Deep Learning for FDD Massive MIMO Systems	Mengxin Li, Jing He and Yuan Cheng

Session V : Artificial Intelligence and Machine Learning II				
Date: August 22nd, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CHINAAI**	46	Research on the Application of Artificial Intelligence Technology in Cross-cultural English Teaching	Lina Chi
8:42-8:54		47	A remote sensing object detection algorithm based on the attention mechanism and Faster R-CNN	Lixia Zhang,Zhiming Ma,Xiangshu Peng
8:54-9:06		48	Route planning of flight diversion based on genetic algorithm and gene recombination	Yinfeng Li,Ping Chen, Yi Mao,Tong Wei,Chang Ruan,Ranran Shang
9:06-9:18		51	Extraction method of powers corridor centre based on grid inspection image and K-Means algorithm	Xiangwei Zhao,Xin Li,Hao Chang,Jun Yao,Beibei Weng
9:18-9:30		56	Research on Road Traffic Moving Target Detection Method Based on Sequential Inter Frame Difference and Optical Flow Method	Da Li,Zhiwei Guan,Qiang Chen,Heping Shi,Tao Wang,Huanhuan Yue
9:30-9:42		62	Ships target detection on water based on improved Faster RCNN	Changjun Wang,Cheng Peng
9:42-9:54		63	New Energy Vehicles Sales Prediction Model Combining the Online Reviews Sentiment Analysis: A Case Study of Chinese New Energy Vehicles Market	Yu Du,Kaiyue Wei,Yongchong Wang,Jingjing Jia
9:54-10:06		64	Multi-Label Algorithm Based on the Second and Higher Order Strategies	Chong Sun,Kaijie He,Weiyu Zhou,Zhongshan Song,Jun Tie
10:06-10:18		65	Named Entity Disambiguation Based on Bidirectional Semantic Path	Zimao Li,Yue Zhang,Fan Yin,Mengyan Nie
10:18-10:30		66	Improved YOLOV5 algorithm for surface defect detection of strip steel	Zeqiang Sun,Bingcai Chen
10:30-10:42		67	Urban Streetscape Tree Density Estimation Algorithm Based on Image Semantic Segmentation	Bin Wang,Ping Sun,Zhongwang Zhang,Lin Ma
10:42-10:54		68	Forest fire detection algorithm based on aerial image	Menglin Qi,Bingcai Chen
10:54-11:06		69	Research on Intrusion Detection Based on Convolutional Neural Network	Min Sun,Min Gao,Ni Liu
11:06-11:18		70	A Robust and Efficient SLAM System in Dynamic Environment Based on Deep Features	Bin Wang,Shaoming Wang,Lin Ma,Danyang Qin
11:18-11:30		72	The Sentiment Analysis and Sentiment Orientation Prediction for Hotel Based on BERT-BiLSTM Model	Yu Du,Yongchong Wang,Kaiyue Wei,Jingjing Jia
11:30-11:42		73	Large Pretrained Models on Multimodal Sentiment Analysis	Yunfeng Song,Xiaochao Fan,Yong Yang,Ge Ren,Weiming Pan
11:42-11:54		74	3D point cloud mapping Based on Intensity Feature	Xiangyu Zheng,Haiyun Gan,Xinchao Liu,Weiwen Lin,Peng Tang
11:54-12:06		75	Customer Stickiness Evaluation Model Research based on Machine Learning	Yuejia Sun
12:06-12:18		76	Matching Based Intelligent Edge Resource Allocation	Peng Qin,Miao Wang,Xiongwen Zhao,Jiayan Liu,Shuo Wang,Haoting He,Yuanbo Xie
12:18-12:30		77	Research on Intrusion Detection Method Based on Deep Convolutional Neural Network	Min Sun,Ni Liu,Min Gao

Session VI : Communications and Signal Processing				
Date: August 22nd, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CSPS**	128	An WiFi-based Human Activity Recognition System under Multi-Source Interference	Jiapeng Li, Ting Jiang, Jiacheng Yu, Xue Ding, Yi Zhong and Yang Liu
8:42-8:54		130	Secure Transmission for Intelligent Reflecting Surface Assisted MISO Systems: Achievable Rate and Optimal Time Allocation	Xiaoming Liu, Xiaokai Liu, Jianwei Tian, Bin Li and Chenglin Zhao
8:54-9:06		137	Fast Beam Tracking for Base Station and UAV Communications	Yiwen Tao, Tao Feng, Bin Li and Chenglin Zhao
9:06-9:18		148	Retrieval of small and medium-scale wind field based on Doppler radar	Liwei Zhang, Xu Wang, Caili Wang and Haijiang Wang
9:18-9:30		150	Air channel measurement in free-space optical communications	Ming Li, Xiaorui Yuan, Ruotong Zou, Jiawei Han and Xiaocheng Wang
9:30-9:42		152	A Survey of Compatibility and Cooperative Construction Mode between Public 5G Network and Smart Grid	Yudong Wang, Lirong Liu, Peizhe Xin and Yang Li
9:42-9:54		153	Energy Efficiency Analysis for Sub-6G and mmWave Massive MIMO Systems	Hao Gao, Xiaoting Xu and Danpu Liu
9:54-10:06	**CHINAAI**	1	Inception based medical image registration	Wenrui Yan,Baoju Zhang,Cuiping Zhang,Jin Zhang,Chuyi Chen
10:06-10:18		10	Transmit RRH Selection in User-Centric Cell-Free Massive MIMO using Discrete Particle Swarm Optimization	Jiaxiang Li,Yingxin Zhao,Hong Wu,Zhiyang Liu
10:18-10:30		11	Research on emotion recognition based on GA-BP-adaboost algorithm	Ruijuan Chen,Xiaofei Diao,Zhihui Sun,Guanghua Deng,Zhe Zhao,Zhuanping Qin
10:30-10:42		13	Medical Image Segmentation Using Transformer	Qian Wang,Longyan Li,Bo Ni,Yu Li,Dejin Kong,Chen Wang,Zan Li
10:42-10:54		14	Satellite Online Scheduling Algorithm Based on Proximal Policy	Xuefei Li,Jia Chen,Xiaotao Cai,Ningbo Cui
10:54-11:06		39	A method of remote sensing image object detection based on attention	Menglin Qi,Bingcai Chen
11:06-11:18		49	Power Grid Routing Based on Spatial Constraints of Remote Sensing Images and Power Planning	Hao Chang,Liang Guo,Minzi Zhang,Xian Zhou,Xin Li,Xiangwei Zhao
11:18-11:30		54	Improved Stereo Matching Algorithm Based on Adaptive Grid for Fixed-wing UAVs	Hua Xia,Hongyuan Zheng,Xiangping Zhai
11:30-11:42		12	Information Extraction of Air-Traffic Control Instructions via Pre-trained Models	Xuan Wang,Hui Ding,Qiucheng Xu,Zeyuan Liu
11:42-11:54		30	Analysis and Research on China’s New Energy Vehicles Industry Policy Based on Policy Subjects, Tools and Objectives	Rui Yang,Min Zhang,Yanli Zhou,Jun Chen,Jingjing Xu

Session VII : System and Network				
Date: August 22nd, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CSPS**	125	A Coupling Analysis Method Based on VRM Model	Zhipeng Qiu, Lisong Wang and Jun Hu
8:42-8:54		132	Formal Verification for VRM Requirement Models	Yang Zhang, Jun Hu, Lisong Wang, Qingfan Gu and Hao Rong
8:54-9:06		133	A Model-based System Safety Analysis Tool and Case Study	Yanhong Dong, Jun Hu, Jian Qi, Qingfan Gu and Hao Rong
9:06-9:18		140	Design of Test Platform for Fuel Cell Power Supply of Small UAV	Changfu Wang, Yaohui Wang, Yanli Sun, Guang Hu and Youjie Zhou
9:18-9:30		141	Design and implementation of UAV based on fuel cell power supply	Youjie Zhou, Hua Li, Chun Wu, Mengyi Wang and Changfu Wang
9:30-9:42		142	Design and Trial Manufacture of Methanol Reforming Hydrogen Generator	Changbo Lu, Lei Xu, Yan Qin, Guang Hu, Weigui Zhou and Youjie Zhou
9:42-9:54		143	Analysis of the Development Status of Micro Gas Turbine Generation Technology at Home and Abroad	Lianling Ren, Liang Wen, Huakui Han, Ruiguo Zhu, Yongcheng Huang and Youjie Zhou
9:54-10:06		146	On-Chip Generation of PAM-4 Signals Based on a 3x3 MMI Architecture for Optical Interconnect and Computing Systems	Trung Thanh Le
10:06-10:18		147	All-optical XNOR and XOR Logic Gates Based on Ultra-compact Multimode Interference Couplers using Silicon Hybrid Plasmonic Waveguides	Trung Thanh Le
10:18-10:30		151	Design and Realization of Dual-axis Follower	Zhenzhen Huang and Peidong Zhuang
10:30-10:42	**CHINAAI**	4	Autoencoder-based baseline parameterized by Central Limit Theorem for ICS cybersecurity	Gang Yue,Zhuo Sun,Jianwei Tan,Hongyu Zhu,Bo Zhang
10:42-10:54		5	Secrecy Capacity-Approaching Neural Communications for Gaussian Wiretap Channel	Jingjing Li,Zhuo Sun, Jinpo Fan,Hongyu Zhu
10:54-11:06		7	MocNet: Less Motion Artifacts, More Clean MRI	Bin Zhao,Shuxue Ding,Mengran Wu,Guohua Liu,Chen Cao,Song Jin,Zhiyang Liu,Hong Wu
11:06-11:18		28	Design and application of endangered animal monitoring system based on mobile APP	Tian Qiu,Cong Chen,Huanshan Wang,Lin Lin
11:18-11:30		41	Development and application of water purification process in Changchun hydro-ecological garden based on BIM+VR Technologys	Xiangshu Peng,Zhiming Ma,Ping Wang,Xuanli Mo,Menglin Qi
11:30-11:42		82	Visual Target Measurement Method in Unknown Environment Based on Stereo SLAM	Lin Ma,Jiayi Zheng,Shizeng Guo,Zhongwang Zhang

Session VIII : Artificial Intelligence and Machine Learning III				
Date: August 22nd, 2021				
Time	**Conference**	**ID**	**Title of the contribution**	**Author**
8:30-8:42	**CHINAAI**	9	Reverse Attention U-Net for Brain Grey Matter Nuclei Segmentation	Mengran Wu,Bin Zhao,Chao Chai,Guohua Liu,Zhiyang Liu
8:42-8:54		21	A Cross-modal Attention and Multi-task Learning Based Approach for Multi-modal Sentiment Analysis	Yunfeng Song,Xiaochao Fan,Yong Yang,Ge Ren,Weiming Pan
8:54-9:06		22	Research on problem matching classification based on artificial intelligence technology	Linpeng Ban,Bo Zhang,Junda Lian
9:06-9:18		23	A Survey of the Application of Natural Language Processing in the Virtual Comment's Classification	Junda Lian,Bo Zhang,Linpeng Ban
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