

Conference Schedule

November 5 th , 2017	
15:00 17:00	Registration <i>Lobby</i>
November 6 st , 2017	
09:00 16:00	Registration <i>Registration Desk on the M3F (In front of the elevator)</i>
09:30 09:50	Opening <i>BANQUET HALL on the M3F</i>
09:50 10:40	Keynote Speech (I): On Entrepreneurship at the Industry 4.0 Era by Prof. JrJung Lyu <i>BANQUET HALL on the M3F</i>
10:40 11:00	Coffee Break <i>BANQUET HALL on the M3F</i>
11:00 11:50	Keynote Speech (II): Principles and Practice of Connectivity and Convergence by Dr Shoumen Palit Austin Datta <i>BANQUET HALL on the M3F</i>
12:00 14:00	Lunch <i>BANQUET HALL on the M3F</i>
14:00 15:20	Session A01 Smart Vehicular Technology <i>Balsam Room on the 7th Floor</i>
15:20 15:40	Coffee Break <i>BANQUET HALL on the M3F</i>
15:40 17:00	Session A03 Smart Wireless Access Technology <i>Balsam Room on the 7th Floor</i>
17:30	Reception Dinner <i>Champs Elysees on 5F</i>

November 7 nd , 2017		
08:30 16:00	Registration <i>The corridor on the 7F</i>	
09:00 10:20	Session B01 Applied Mathematics and It Applications	Session B02 Intelligent Railway Technology (I)
	Balsam Room on the 7 th Floor	Phoenix Room on the 7 th Floor
10:20 10:40	Coffee Break Golden Dragon Hall – II on the 7 th Floor	
10:40 12:00	Session B03 Innovative Intelligent Computation Technology (I)	Session B04 Intelligent Railway Technology (II)
	Balsam Room on the 7 th Floor	Phoenix Room on the 7 th Floor
12:00 14:00	Lunch Golden Dragon Hall – II on the 7 th Floor	
14:00 15:20	Session B05 Innovative Intelligent Computation Technology (II)	
	Balsam Room on the 7 th Floor	
15:20 15:40	Coffee Break Golden Dragon Hall – II on the 7 th Floor	
15:40 17:00	Session B07 Innovative Electrical Technology (I)	
	Balsam Room on the 7 th Floor	
17:30	Banquet Golden Dragon Hall – I on the 7 th Floor	

November 8 rd , 2017	
08:40 11:00	Registration <i>The corridor on the 7F</i>
09:00 10:00	Session C01 Innovative Electrical Technology (II) Balsam Room on the 7 th Floor
10:00 10:20	Coffee Break Golden Phoenix Room– II on the 7th Floor
10:20 11:05	Session C02 Smart Technologies and Applications Balsam Room on the 7 th Floor
11:30	Lunch <i>Champs Elysees on 5F</i>

Session A01: Smart Vehicular Technology

Session Chairs:

Prof. Shi-Huang Chen, Shu-Te University

Paper No.: VTCA-2017-IS0501

Paper Title: Easy *i* -Move: Structured Image Recognition Solution for Auto Guided Vehicles

Author(s): Yen-Hui Kuo, Shu-Hui Lin, and Eric Hsiao-Kuang Wu

Paper No.: VTCA-2017-IS0402

Paper Title: Evaluating Multi-dimensional Abilities of Bus Drivers

Author(s): Ting-An Kuo, Chiuhsiang Joe Lin, and Po-Hsiang Liu

Paper No.: VTCA-2017-IS0201

Paper Title: Predicting the Travel Time in Using Recurrent Neural Networks: A Case Study of Fuzhou

Author(s): Luming Li and Xinhua Jiang

Paper No.: VTCA-2017-IS0214

Paper Title: Driving Behavior Motivation Model Research Based on Vehicle Trajectory Data

Author(s): Yun Chen, Xinhua Jiang, Lyuchao Liao, Fumin Zou, and Meirun Zhang

Paper No.: VTCA-2017-IS0215

Paper Title: A Ranging Algorithm for Mobile Vehicles Based on Kalman Filter

Author(s): Junmin Wang, Fumin Zou, Maolin Zhang, Lyuchao Liao, and Yaxue Pang

Paper No.: VTCA-2017-IS0502

Paper Title: The Evaluation of the Video Codec Performances on the Driving Recorder with Different Vehicle Speeds

Author(s): Shi-Huang Chen, Zhi-Quan Huang, Wen-Kai Liu, and Jui-Yang Tsai

Session A03: Smart Wireless Access Technology

Session Chairs:

Prof. Tang-Hsien Chang, Fujian University of Technology

Paper No.: VTCA-2017-0015

Paper Title: An Implementation of Relay Function based on LTE Technology for Multi-UAV Communication

Author(s): Weng-Chung Tsai, Nien-Ting Huang, Shih-Hsuan Lin, and Mao-Lun Chiang

Paper No.: VTCA-2017-0022

Paper Title: Tendency of Connected VIP and ITS Evolution

Author(s): Tang-Hsien Chang, Ying-Chih Lu, and Xiao-Ting Dai

Paper No.: VTCA-2017-IS0206

Paper Title: Join I/Q Imbalance Compensation and Channel Equalization Algorithm for STBC MIMO-OFDM Systems

Author(s): Chih-Feng Wu, Yi-Hung Lin, Muh-Tian Shiue, and Jeng-Shyang Pan

Paper No.: VTCA-2017-0080

Paper Title: A Constructive Problem-based Course Design for Internet Of Things

Author(s): Xiaohu Ma, Yeh-Jong Pan, Fang Chen, Xinyi Ding, and Shih-Pang Tseng

Session B01: Applied Mathematics and It Applications

Session Chairs:

Prof. Lin Xu, Fujian Normal University

Paper No.: VTCA-2017-IS0301

Paper Title: Time Domain Acoustic Scattering from Locally Perturbed Flat Substrates

Author(s): Bo Chen, Fuquan Zhang, Lin Xu, and Minghui Liu

Paper No.: VTCA-2017-0036

Paper Title: Adversarial Multiarmed Bandit Problems in Gradually Evolving Worlds

Author(s): Chia-Jung Lee, Yalei Yang, Sheng-Hui Meng, and Tien-Wen Sung

Paper No.: VTCA-2017-IS0302

Paper Title: A Video Coloring Method Based on CNN and Feature Point Tracking

Author(s): George Guan, Fuquan Zhang, Gangyi Ding, Meng Niu, and Lin Xu

Paper No.: VTCA-2017-IS0306

Paper Title: Opinion Target Extraction for the Chinese Formal Text Based on Dependency Relations

Author(s): Xiaoyan Yang, Ge Xu, Fuquan Zhang, Xiangwen Liao, and Lin Xu

Paper No.: VTCA-2017-IS0221

Paper Title: Power Supply Loss Riding Through Method for High-Voltage Great-Power Cascaded H-Bridge Multilevel Inverters

Author(s): Xinjian Cai, Tianjian Li, and Jiabin Chen

Session B02: Intelligent Railway Technology (I)

Session Chairs:

Prof. Shaoquan Ni, Southwest Jiaotong University

Paper No.: VTCA-2017-0042

Paper Title: Railway Train Working Diagram Plan System

Author(s): Shaoquan Ni, Miaomiao Lyu, and Hongxia Lv

Paper No.: VTCA-2017-0046

Paper Title: Railway Passenger Service Mode on "Internet +"

Author(s): Tao Chen, Zhenning Zhou, Jieru Zhang, and Shaoquan Ni

Paper No.: VTCA-2017-0049

Paper Title: Design of High Speed Train Operation Plan Simulation System

Author(s): Dingjun Chen, Xinyi Lin, Hui Zhang, and Kaiteng Wu

Paper No.: VTCA-2017-0059

Paper Title: Service Quality Evaluation of Railway Freight Transportation Network
Based on Bayes Theory

Author(s): Xuepeng Zhang, Shengdong Li, Xiucong Li, Xinyi Lin, and Xiaoyuan Lv

Session B03: Innovative Intelligent Computation Technology (I)

Session Chairs:

Prof. Fuquan Zhang, Minjiang Univeristy & Beijing Institute of Technology

Paper No.: VTCA-2017-0006

Paper Title: Design of Gear Reducer Based On FOA Optimization Algorithm

Author(s): Xiaojia Lin, Fuquan Zhang, and Lin Xu

Paper No.: VTCA-2017-IS0304

Paper Title: A Bidirectional Collaborative Filtering Recommender System Based on EM algorithm

Author(s): Yu Mao, Fuquan Zhang, Lin Xu, Dakui Zhang, and Hui Yang

Paper No.: VTCA-2017-0077

Paper Title: A Novel Hyrid GWO-FPA Algorithm for Optimization Applications

Author(s): Jeng-Shyang Pan, Thi-Kien Dao, Shu-Chuan Chu, and Trong-The Nguyen

Paper No.: VTCA-2017-0018

Paper Title: Transfer Knowledge Based Evolution of An External Population for Differential Evolution

Author(s): Zhenyu Meng, Jeng-Shyang Pan, and Xiaoqing Li

Session B04: Intelligent Railway Technology (II)

Session Chairs:

Prof. Shaoquan Ni, Southwest Jiaotong University

Paper No.: VTCA-2017-0064

Paper Title: Train Headway Calculation and Simulation System for High-speed Railway

Author(s): Guolong Gao, Jie Zhang, Wenjing Lai, and Yuchao Xin

Paper No.: VTCA-2017-0069

Paper Title: Train Scheduling for Heavy Haul Railway

Author(s): Pei Wang, Jie Zhang, Baoheng Feng, and Wengao Peng

Paper No.: VTCA-2017-0072

Paper Title: Research on Train Delay Diagnosis in Train Diagram Based on Big Data Technology

Author(s): Yong Zhang, Wenqing Li, Shaoquan Ni, and Xiaowei Liu

Session B05: Innovative Intelligent Computation Technology (II)

Session Chairs:

Prof. Lin Xu, Fujian Normal University

Paper No.: VTCA-2017-IS0208

Paper Title: Directional Shuffled Frog Leaping Algorithm

Author(s): Lingping Kong, Jeng-Shyang Pan, Shu-Chuan Chu, and John F. Roddick

Paper No.: VTCA-2017-IS0305

Paper Title: Review of Intelligent Computing Application

Author(s): Yiou Wang, Tianyuan Liu, Fuquan Zhang, Lin Xu, Gangyi Ding, Rui Xiong, and Fei Liu

Paper No.: VTCA-2017-IS0303

Paper Title: Seam Carving Algorithm Based on Saliency

Author(s): Wen Lin, Fuquan Zhang, Renbao Lian, Lin Xu, Xueyun Chen, and Linghong Kuang

Session B07: Innovative Electrical Technology (I)

Session Chairs:

Prof. Sheng-Hui Meng, Fujian University of Technology

Paper No.: VTCA-2017-IS0209

Paper Title: An Artificial Indoor Farm that Subverts Traditional Farming Patterns

Author(s): Deyao Lin, Sheng-Hui Meng, and Shuhua Lin

Paper No.: VTCA-2017-IS0222

Paper Title: Graphene Saturable Absorption and Applications in Fiber Laser

Author(s): Hancong Wang, Jinyang Lin, and Shihao Huang

Paper No.: VTCA-2017-IS0205

Paper Title: Adaptive Nonsmooth Attitude Tracking Control of Quadrotor UAV with Dynamic Uncertainties

Author(s): Dongwei He, Pei Gao, Lisang Liu, Xuecheng Jiang, and Jishi Zheng

Paper No.: VTCA-2017-IS0207

Paper Title: Design of the Classroom Intelligent Light Control System based on ARM9

Author(s): Xiuzhen Zhang and Lisang Liu

Paper No.: VTCA-2017-IS0401

Paper Title: The Integration of DFX Principles with TRIZ for Product Design - A Case Study of Electric Scooter

Author(s): Tien-Lun Liu, Yi-Chen Li, and Ji-Ze Xiao

Session C01: Innovative Electrical Technology (II)

Session Chairs:

Prof. Ying-Chung Chen, National Sun Yat-Sen University

Paper No.: VTCA-2017-IS0211

Paper Title: On Linear Precoding of Unitary Space-Time Modulation for Spatial-Temporal Correlated Flat Fading Channel

Author(s): Caihong Yu, Kejun Jia, and Zheng Yang

Paper No.: VTCA-2017-IS0210

Paper Title: Design for Intelligent Control System of Curtain Based on Arduino

Author(s): Sheng-Hui Meng, An-Chi Huang, Chia-Jung Lee, Tian-Jiun Huang, and Jian-Nan Dal

Paper No.: VTCA-2017-0032

Paper Title: Simulation and Modeling of a Solidly Mounted Resonator

Author(s): Sheng-Hui Meng, An-Chi Huang, and Ying-Chung Chen

Session C02: Smart Technologies and Applications (Post Session)

Paper No.: VTCA-2017-IS0203

Paper Title: Application of Double-hidden Layer BP Neural Network in Transformer Fault Alarm

Author(s): Xin Su, Xinhua Jiang, Shunmiao Zhang, and Yao He

Paper No.: VTCA-2017-IS0212

Paper Title: Designing a Lightweight Cipher Algorithm Based on Chaos Theory and LoRaWAN

Author(s): Chunlei Fan and Qun Ding

Paper No.: VTCA-2017-IS0213

Paper Title: Prediction of Hourly Power Consumption for a Central Air-conditioning System Based on Different Machine Learning Methods

Author(s): Siqu Gao, Fumin Zou, Xinhua Jiang, Lyuchao Liao, and Yun Chen

Paper No.: VTCA-2017-IS0216

Paper Title: Research on Ships Collision Avoidance Based on Chaotic Particle Swarm Optimization

Author(s): Lisang Liu, Dongwei He, Ying Ma, Tianjian Li and Jianxing Li

Paper No.: VTCA-2017-IS0217

Paper Title: Research on the Complexity of Binary Chaotic Sequences

Author(s): Chunyuan Liu, Qun Ding, and Wei Xu

Paper No.: VTCA-2017-IS0218

Paper Title: Chaotic Sequence Generator Based on m Sequence Perturbation

Author(s): Chuanfu Wang and Qun Ding

Paper No.: VTCA-2017-IS0219

Paper Title: Electromagnetic Compatibility Analysis of PIND Equipment for Rocket Engine Attached Pipes

Author(s): Guotao Wang, Qun Ding, Leizhen Gao, Qiang Wang, and Liang Guo

Paper No.: VTCA-2017-IS0220

Paper Title: Research on Multiple Classifiers Combination Method for Remote Sensing Images

Author(s): Aiping Jiang, Shengjie Xiao, Longyun Wei, and Yanlin Zhu

Paper No.: VTCA-2017-IS0202

Paper Title: Compact Evolutionary Algorithm Based Ontology Meta-matching

Author(s): Xingsi Xue and Shijian Liu

Paper No.: VTCA-2017-IS0204

Paper Title: Research on Detection Algorithm of Roadway Intersection Rule
Detection Based on Big Data

Author(s): Meirun Zhang, Fumin Zou, Yanling Deng, Xinhua Jiang, Lvchao Liao, and
Yun Chen