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**3rd EAI International Conference on Industrial Networks and Intelligent Systems (INISCOM2017)**

**Technical Program**

**Ho Chi Minh City - Vietnam**

**September 4, 2017**

**Ho Chi Minh City University of Transport, Vietnam**

**Sponsors and Organizers:**

***European Alliance for Innovation***

***Ho Chi Minh City University of Transport, Vietnam***

**2017**

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**6/11/2017**

**Technical Program at Glance**

**Ho Chi Minh City, Vietnam, September 4, 2017**

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| **DATE** | **TIME** | | **ROOM** | | |
| **Monday – September 4, 2017** |  | | **Room A** | **Room B**  **Room 3** | |
| 08:00-8:15 | | **WELCOME & OPENING** | | |
| 08:15-09:00 | | **Keynote 1** | | |
| 09:00-09:45 | | **Keynote 2** | | |
| 09:45-10:05 | | **Coffee Break** | | |
| 10:05-12:00 | | TN1 | CS | |
| **12:00-14:00** | | **LUNCH BREAK** | | |
| 14:00-15:50 | | TN2 | IA | |
| 15:50-16:10 | | **Coffee Break** | | |
| 16:10-18:00 | | TN3 | SH | |
| 18:30-21:00 | | **BANQUET AND BEST PAPER AWARD** | | |
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|  | **INISCOM2017**  **Technical Program –Ho Chi Minh City, Vietnam,**  **Monday, September 4, 2017** |

**Registration: (07:00-08:00)**

**Venue:** Entrance of Main Hall

**Opening Session: (08:00-08:15)**

**Room:** Main Hall

**Speakers:** Asso. Prof.Nguyen Van Thu, President of Ho Chi Minh City University of Transport, Vietnam

Dr. Trung Q. Duong, Queen's University Belfast, United Kingdom

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**Keynote 1 (08:15-09:00)**

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**Room:** Main Hall

**Speaker:** Prof. Octavia A. Dobre, Memorial University, Canada

**Title:** Quo Vadis, 5G?

**Chair:** Dr. Trung Q. Duong, Queen’s University Belfast, United Kingdom

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**Keynote 2 (09:00-09:45)**

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**Room:** Main Hall

**Speaker:** Prof. Muhammad Imran, Glasgow College UESTC, United Kingdom

**Title:** User Centric Approach for Distributed Agile and Reconfigurable 5G Networks

**Chair:** Dr. Nguyen-Son Vo, Duy Tan University, Vietnam

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**COFFE BREAK (09:45 – 10:05)**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Monday Morning Sessions—TN (10:05-12:00)**

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**TN-1, Room:** Room A

**Session Title:** Telecommunications Systems and Networks  
**Session Chair/Co-Chair:** Dr. Nguyen-Son Vo, Duy Tan University, Vietnam

Asso. Prof. Xuan-Kien Dang, Ho Chi Minh City University of Transport, Vietnam

**271037:** Swarm Intelligence Inspired Adaptive Traffic Control for Traffic Networks, Daxin Tian, Yu Wei, Jianshan Zhou, and Xuting Duan (Beihang University, Beijing Advanced Innovation Center for Big Data and Brain Computing, China); Wenyang Wang, Rong Hui, and Peng Guo (China Automotive Technology and Research Center, Automotive Engineering Research Institute, China)

**270781:** Energy-Efficient Data Collection Using Lossless Compression for Industrial Wireless Sensor Networks, Xiaolan Tang, Hua Xie, and Wenlong Chen (College of Information Engineering, Capital Normal University, China); Jianwei Niu (State Key Laboratory of Virtual Reality Technology and Systems, School of Computer Science and Engineering, Beihang University, China)

**270864:** Outage Probability Analysis of Single Energy Constraint Relay NOMA Network, Sang Quang Nguyen and Dac-Binh Ha (Duy Tan University, Vietnam)

Sciences, Norway)

**271208:** SDN based Content-Centric QoS-Guaranteed for Wireless Multimedia Sensor Networks, Gaolei Li, Jun Wu, Jianhua Li, Kuan Wang, and Shan He (Shanghai Jiao Tong University, China)

**270910:** Study on the Effect of the Sensor Array on the Source Localization Performance in Shallow Water, Phu Ninh Tran and Khanh Dang Trinh (Le Quy Don University, Vietnam); Helio Augusto Muzamane (Pedagogic University of Mozambique, Mozambique)

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**Monday Morning Sessions—CS (10:05-12:00)**

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**CS, Room:** Room B

**Session Title:** Computer Science  
**Session Chair/Co-Chair:** Dr. Viet-Hung Dang, Duy Tan University, Vietnam

Dr. Phuong Cong Vo, Ho Chi Minh City University of Transport, Vietnam

**271312:** Coupling Statistical and Agent-based Models in the Optimization of Traffic Signal Control, Dang-Truong Thinh and Hoang-Van Dong (Hanoi University of Science and Technology, Vietnam); Nguyen-Ngoc Doanh (Thuy Loi University, Vietnam); Nguyen-Thi-Ngoc Anh (IRD, Sorbonne Universités, UPMC Univ Paris 06 UMMISCO, France)

**271309:** Optimizing Vehicle Routing with Path and Carbon Dioxide Emission for Municipal Solid Waste Collection in Ha Giang, Vietnam, Anh Dao-Tuan and Anh Bui-Tuan (Hanoi University of Science and Technology, Vietnam); Anh Nguyen-Thi-Ngoc and Khanh Nguyen-Trong (IIRD, Sorbonne Universités, UPMC Univ Paris 06 UMMISCO, France); Van Dinh-Thi-Hai (Vietnam National University of Agriculture, Vietnam)

**271164:** Model-based Sensitivity of a Disaster Tolerant Active-Active GENESIS Cloud System, Tuan Anh Nguyen and Dugki Min (Konkuk University, Seoul, South Korea); Eunmi Choi (Kookmin University,Seoul, South Korea); Tran Duc Thang and Nguyen Nhu Son (Institute of Information Technology, Vietnam Academy of Science and Technology, Vietnam)

**271170:** Integrated Sentiment and Emotion into Estimating the Similarity among Entries on Social Network, Thi Hoi Nguyen and Gia Manh Dam (Vietnam Commercial University, Vietnam); Dinh Que Tran and Manh Hung Nguyen (Posts and Telecommunications Institute of Technology (PTIT), Hanoi, Vietnam)

**272140:** A Functional Optimization Method for Continuous Domains, Viet-Hung Dang (Duy Tan University, Vietnam); Ngo Anh Vien (University of Stutgart, Germany); Pham Le-Tuyen and Taechoong Chung (Kyung Hee University, Korea)

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**LUNCH BREAK (12:00 – 14:00)**

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**Monday Afternoon Session—TN (** **14:00-15:50)**

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**TN2, Room:** Room A

**Session Title:** Telecommunications Systems and Networks

**Session Chair/Co-Chair:** Dr. Trung Q. Duong, Queen’s University Belfast, UK

Asso. Prof. Vu Van Yem, Hanoi University of Science and Technology, Vietnam

**271117:** Performance Evaluation on UiTiOt Container-based Emulation Testbed, Chuong Dang-Le-Bao, Nhan Ly-Trong, and Quan Le-Trung (University of Information Technology, Vietnam National University HCM City, Vietnam)

**271338:** ICI Mitigation by Estimation of Double Carrier Frequency Offsets in High-Speed-Railway Communication Systems for Smart Cities, Vu Van Yem and Vu Nhat Minh (Hanoi University of Science and Technology, Vietnam); Trinh Thi Huong and Nguyen Duy Viet (University of Transport and Communications, Vietnam)

**270875:** Three-way Massive MIMO Relaying with Successive Cancelation Decoding, Chung Duc Ho, Hien Quoc Ngo, and Michail Matthaiou (Queen's University Belfast, UK)

**271207:** Performance Analysis of Time-Switching Energy Harvesting Device-to-Device Link Underlying Small-Cell-Networks, Mohammed Nasser Altawaim, Nam-Phong Nguyen, and Wiliam G. Scanlon (Queen’s University Belfast, UK)

**271187:** Secure Energy Harvesting Communications with Partial Relay Selection over Nakagami-m Fading Channels, Cheng Yin, Xiangyu He, Nam-Phong Nguyen, and Emiliano Garcia-Palacios (Queen’s University Belfast, UK)

**271185:** Optimization of Multi-Function Sensor Placement Satisfying Detection Coverage, Qingzhong Liang and Yuanyuan Fan (China University of Geosciences and Hubei Key Laboratory of Intelligent Geo-Information Processing, China)

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**Monday Afternoon Session—IA (** **14:00-15:50)**

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**IA, Room:** Room B

**Session Title:** Intelligent Systems, Industrial Networks, and Applications  
**Session Chair/Co-Chair:** Dr. Anh-Vu Ho, Eastern International University, Vietnam

Dr. Nguyen-Son Vo, Duy Tan University, Vietnam

**272173:** Detecting Concept Drifts of Imbalance Data in Manufacturing Industries, Chun-Cheng Lin, Jing-Hong Kuo, and Linnan Chen (National Chiao Tung University, Taiwan); Der-Jiunn Deng (National Changhua Unviersity of Education, Taiwan)

**271114:** A Short Survey on Fault Diagnosis of Rotating Machinery Using Entropy Techniques, Zhiqiang Huo, Yu Zhang, and Lei Shu (University of Lincoln, Lincoln, UK and Guangdong University of Petrochemical Technology, China)

**271036:** An Intrusion Detection System Based on Machine Learning for CAN-Bus, Daxin Tian, Yuzhou Li, Yunpeng Wang, Congyu Wang, and Ziyi Dai (Beihang University and Jiangsu Province Collaborative Innovation Center of Modern Urban Traffic Technologies, China); Wenyang Wang, Rong Hui, and Peng Guo (Automotive Engineering Research Institute, China)

**271212:** A Buck-Boost Multilevel Inverter for PV Systems in Smart Cities, Anh-Vu Ho (Eastern International University, Vietnam); Tae-Won Chun (University of Ulsan, Korea)

**271216:** A High Step-Up DC-DC Converter for Renewable Energy Applications, Anh-Vu Ho, Thanh-Son Nguyen, and Hoai-Nghia Duong (Eastern International University, Vietnam); Duc-Linh Tran (RMIT University, Australia)

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**COFFE BREAK (15:50 – 16:10)**

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**Monday Afternoon Session—TN (16:10-18:00)**

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**TN3, Room:** Room A

**Session Title:** Telecommunications Systems and Networks

**Session Chair/Co-Chair:** Dr. Pham Ngoc Son, Ho Chi Minh City University of Technology and Education, VietNam

Dr. Sang Quang Nguyen, Duy Tan University, Vietnam

**271116:** Toward a Real-Time Development and Deployment of IoTs Application for Smart Garden on OpenStack Cloud, Dang Huynh-Van, Khanh Tran-Quoc, and Quan Le-Trung (University of Information Technology, Viet Nam National University – Ho Chi Minh City, Vietnam)

**271320:** An Energy-Aware Approach for Event-Driven Multimedia Data Acquisition in WMSNs, Phan Van Vinh (Eastern International University, Vietnam); Hoon Oh (University of Ulsan, Korea)

**270845:** Program Popularity Prediction Approach for Internet TV Based on Trend Detecting, Chengang Zhu and Guang Cheng (Southeast University, China); Kun Wang (Nanjing University of Posts and Telecommunications, China)

**271300:** Exact Outage Probability of Two-Way Decode-and-Forward Scheme with Energy Harvesting from Intermediate Relaying Station, Huynh Tan Phuoc (Eastern International University, Vietnam); Pham Ngoc Son (Ho Chi Minh City University of Technology and Education, VietNam); Miroslav Voznak (VSB Technical University of Ostrava, Czech Republic)

**270948:** Enhancing Performance of Asynchronous Cooperative Relay Network with Partial Feedback, The-Nghiep Tran and Huu-Minh Nguyen (Le Quy Don Technical University, Vietnam); Van-Bien Pham (Vietnam People's Army Broadcast Center, Vietnam)

**270888:** Outage Probability for Cognitive Heterogeneous Networks with Unreliable Backhaul Connections, Huy T. Nguyen and Won J. Hwang (Inje University, Korea); Dac-Binh Ha and Sang Quang Nguyen (Duy Tan University, Vietnam)

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**Monday Afternoon Session—SH (16:10-18:00)**

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**SH, Room:** Room B

**Session Title:** Security & Privacy and Hardware & Software Design  
**Session Chair/Co-Chair:** Prof. Thuong Le-Tien, Bach Khoa University of Ho Chi Minh City, Vietnam

Dr. LeNam Tran, National University of Ireland Maynooth, Ireland

**271206:** Method for Pseudo-probabilistic Block Encryption, Moldovyan Nikolay Andreevich and Moldovyan Alexander Andreevich (St.Petersburg Institute for Informatics and Automation of Russian Academy of Sciences, Russian); Tam Nguyen Duc, Hai Nguyen Nam, and Minh Nguyen Hieu (Academy of Cryptography Techniques, Vietnam)

**271115:** Crack Detection in Rotating Shafts using Wavelet Analysis, Shannon Entropy and Multi-class SVM, Zhiqiang Huo, Yu Zhang, and Zhangbing Zhou (University of Lincoln, UK and China University of Geosciences, China); Jianfeng Huang (Guangdong University of Petrochemical Technology, China)

**271376:** A New Resampling Parameter Algorithm for Kullback-Leibler Distance based on Particle Filter, Nga Ly-Tu, Thuong Le-Tien, and Linh Mai (International University-VNUHCM Ho Chi Minh city, Vietnam)

**271169:** Image Clustering Using Improved Particle Swarm Optimization, Thuy Xuan Pham, Patrick Siarry, Hamouche Oulhadj (University Paris-Est Creteil, France)

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**BANQUET AND BEST PAPER AWARD (18:30 – 21:00)**

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**NO TECHNICAL SESSIONS ON TUESDAY**

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