Session Information

December 12, 2017 (Tuesday)		
Time	Content	
09:00~09:40	Registration	
09:40~10:00	Opening	
10:00~11:00	Keynote Speech	
11:10~12:40	CCITSA2017	
	Session A	Session B
12:40~14:00	Lunch	
14:00~15:30	CCITSA2017	
	Session C	Session D
15:30~17:00	CCITSA2017	
	Session E	Session F
17:30	Banquet	

December 13, 2017 (Wednesday)	
Time	Content
09:00~10:00	Registration
10:00~16:30	Hualien Trip

December 14, 2017 (Thursday)	
Time	Content
09:00~10:00	Registration
10:00~16:30	Hualien County Stone Scuiptural Museum Visit

Keynote Speech

Keynote Speaker: Prof. Phone Lin

Education

- 2001. Ph.D. in Computer Science & Information Engineering, National Chiao Tung University, Hsinchu, R.O.C.

Title: ***A Peer-to-Peer Architecture for Heterogeneous Social Networks***

Abstract:

The unprecedented growth and influence of Social Network Sites (SNSs) have opened the opportunity for researchers to explore a large amount of social and behavioral data. The heterogeneity of SNSs further sparks research innovations to develop methods and applications that integrate resources and offer more seamless services across SNSs. Specifically, aiming at the integration of social relationship data, a much less studied subject, in this talk, I will show a peer-to-peer architecture, namely *P2P-iSN*, to integrate the heterogeneous SNSs. The P2P-iSN allows users from heterogeneous SNSs to communicate without involving the SNS they have registered with. Under this architecture, I will present a Global Relationship Model (GRM) to capture the relationship strength between users and then develop a searching mechanism, namely *i-Search*, to find the optimal social path between any two users who are meaningfully connected in heterogeneous SNSs. We evaluate the performance of P2P-iSN and show that our P2P-iSN can effectively support many future applications such as improved trust/reputation metrics and integrated content-sharing. With the proposed P2P-iSN, SNS developers can design more effective user-centric SNS applications. The results of this work have been published in IEEE Network Magazine.

Author Biography

Phone Lin (M'02–SM'06-F'17) received the BS and Ph.D. degrees of Computer Science & Information Engineering from National Chiao Tung University, Hsinchu, Taiwan, in 1996 and 2001, respectively. He is a Professor with National Taiwan University, Taiwan, holding a professorship within the Department of Computer Science and Information Engineering, Graduate Institute of Networking and Multimedia, and Telecommunications Research Center of College of EECS, and Graduate Institute of Medical Device and Imaging of College of Medicine.

Dr. Lin serves on the Editorial Board of several journals, such as IEEE Transactions on Vehicular Technology, IEEE Network Magazine, IEEE Internet of Things Journal, Computer Networks Journal, etc. He has also been involved in several prestigious conferences, such as Local Arrangement Co-Chair, IEEE VTC2010-Spring, Taipei, Taiwan, the Technical Program Chair of WPMC 2012, Co-Chair of the Wireless Networking Symposium of IEEE Globecom 2014, and TPC member of IEEE Infocom 2010-2017. He was Chair of IEEE Vehicular Technology Society Taipei Chapter 2014-2015.

Lin has received many prestigious research awards, such as the Outstanding Research Award, Ministry of Science and Technology, Taiwan in 2016, the Best Young Researcher of IEEE ComSoc Asia-Pacific Young Researcher Award in 2007, the Distinguished Electrical Engineering Professor Award of the Chinese Institute of Electrical Engineering in 2012, the Ten Outstanding Young Persons Award of Taiwan (Science & Technology) in 2009, the Junior Researcher Award from Academia Sinica, R.O.C. in 2010. He has been an IEEE Fellow and ACM Senior Member since 2017 and 2012, respectively.

Experience

- 2008.08-present: Professor, Department of Computer Science and Information Engineering, College of Electrical Engineering and Computer Science, National Taiwan University
- 2008.08-present: Professor, Graduate Institute of Networking and Multimedia, College of Electrical Engineering and Computer Science, National Taiwan University
- 2009.08-present: Professor, Telecommunications Research Center, College of Electrical Engineering and Computer Science, National Taiwan University
- 2015.08-present: Professor, Graduate Institute of Medical Device and Imaging, College of Medicine, National Taiwan University

- 2017.02-present: Area Editor, Springer Encyclopedia of Wireless Networks
- 2016.01-present: Editor, IEEE Network Magazine
- 2013.07-present: Editor, IEEE Internet of Things Journal (IoT-J)
- 2011.10-present: Editor, IEEE Wireless Communications Magazine
- 2010.12-present: Area Editor, Computer Networks Journal (Elsevier)
- 2007.06-present: Editor, ACM/Springer Wireless Networks (WINET)
- 2006.06-present: Editor, IEEE Transactions on Vehicular Technology
- 2015.12-present: Associate Editor, Journal of Information Science and Engineering (JISE)
- 2011.12-present: Editor, IEEE/KICS Journal of Communications and Networks (JCN)

CCITSA 2017 Program

Session A

Date: December 12, 2017 (Tuesday)
Time: 11:10~12:40
Room: Science and Engineering Building II – A407 room
Session chair: Dan Tao

No.	Title & Authors
A1 11:10 ~ 11:25	**Partition Connectivity Recovery Algorithm based on Relay Node Deployment for Wireless Sensor Networks** *Jikai Zhang and Dan Tao.*
A2 11:25 ~ 11:40	**Research on Service-oriented Virtual Network Mapping Algorithm** *Yongan Guo, Yichu Bai, Hao She, Longxiang Yang and Hongbo Zhu.*
A3 11:40 ~ 11:55	**Dissecting Campus WiFi Connections in an Empirical View** *Chengwei Zhang, Xiaojun Hei and Liang Xiao.*
A4 11:55 ~ 12:10	**Visual Quality Improvement for Ordered Dither Block Truncdation Coding** *Chyi-Hwa Chu.*
A5 12:10 ~ 12:25	**Online Energy Efficiency Optimization of Automatic Train Operation based on Neural Network Predictive Control** *Tangsong Feng and Fang Cao.*
A6 12:25 ~ 12:40	**Antenna Design System Based on Augmented Reality** *Jiefeng Guo, Xiaokang Chen, Zuosheng Xie and Lianfen Huang.*

CCITSA 2017 Program

Session B

Date: December 12, 2017 (Tuesday)
Time: 11:10~12:40
Room: Science and Engineering Building II – A127 room
Session chair: Emilio Insfran

No.	Title & Authors
B1 11:10 ~ 11:25	**Towards an Intelligent Provisioning of Cloud Infrastructure** *Julio Sandobalin, Emilio Insfran and Silvia Abrahao.*
B2 11:25 ~ 11:40	**Architecture Description Language for Connecting IoT Devices to the Cloud** *Daniel Alberto Rodriguez Lopez, Juan Rodríguez, Miguel Angel Zúñiga Prieto, Lizandro Solano-Quinde, Emilio Insfran and Silvia Abrahao.*
B3 11:40 ~ 11:55	**Efficient Least Squares Regression Algorithm for Autonomous Maneuvering UAV System** *Hanguk Jee and Jaesung Lim.*
B4 11:55 ~ 12:10	**Good Picture Selection Based on Facial Expression Using Deep Learning** *Umer Waqas and Tae Young Choe.*
B5 12:10 ~ 12:25	**Dynamic Road Surface Detection Method based on 3D Lidar** *Yi-Shueh Tsai and Yu-Fang Wang.*
B6 12:25 ~ 12:40	**A Robust Fusing Strategy for Respiratory Rate Estimation From Photoplethysmography Signals** *Chi-Keng Wu and Pau-Choo Chung.*

CCITSA 2017 Program

Session C

Date: December 12, 2017 (Tuesday)
Time: 14:00~15:30
Room: Science and Engineering Building II – A407 room
Session chair: Jen-Yeu Chen

No.	Title & Authors
C1 14:00 ~ 14:15	**MT-UCON: A Collaborative Multi-Tenant Access Control Model** *Yi Ren, Faru Zhao and Zhaowen Lin.*
C2 14:15 ~ 14:30	**A Power-Aware VM Scheduling Strategy for Cloud Computing** *Yide Wei, Faru Zhao and Zhaowen Lin.*
C3 14:30 ~ 14:45	**Power Saving Strategy for Sensor Node in Food Tracing and Monitoring System** *Shu Liu, Hong Luo and Yan Sun.*
C4 14:45 ~ 15:00	**An Efficient Storage and Query Scheme based on Block Chain for Agricultural Products Tracking** *Yadong Liu, Yan Sun and Hong Luo.*
C5 15:00 ~ 15:15	**A Safe and Efficient Storage Scheme based on BlockChain and IPFS for Agricultural Products Tracking** *Jintao Hao, Yan Sun and Hong Luo.*

CCITSA 2017 Program

Session D

Date: December 12, 2017 (Tuesday)
Time: 14:00~15:30
Room: Science and Engineering Building II – A127 room
Session chair: Tin-Yu Wu

No.	Title & Authors
D1 14:00 ~ 14:15	**Deep Learning based Anomaly Prediction in Sensor Data Streams** *Le Sun, Jiangang Ma, Hai Dong, Chen Wang and Yanchun Zhang.*
D2 14:15 ~ 14:30	**User-oriented Cloud SLA Assurance Framework** *Chen Wang, Le Sun, Hai Dong, Jiangang Ma and Yanchun Zhang.*
D3 14:30 ~ 14:45	**Survey of Cloud SLA Assurance in Pre-interaction and Post-interaction Start Time Phases** *Le Sun, Hai Dong, Jiangang Ma, Chen Wang and Yanchun Zhang.*
D4 14:45 ~ 15:00	**A Framework for Discovering Variable-length Motifs in Medical Data Streams** *Le Sun, Jiangang Ma, Hai Dong and Yanchun Zhang.*
D5 15:00 ~ 15:15	**Incident detection based on Mobile Crowd Sensing for Smart City** *Peng Zhang, Zhenjiang Zhang and Han-Chieh Chao.*

CCITSA 2017 Program

Session E

Date: December 12, 2017 (Tuesday)
Time: 15:30~17:00
Room: Science and Engineering Building II – A407 room
Session chair: Yun Liu

No.	Title & Authors
E1 15:30 ~ 15:50	**Depth Image-based Rendering with Adaptive Compensation Method** *Chih-Hsien Hsia.*
E2 15:50 ~ 16:10	**Research on Spectrum Sensing Technology for Integrated Space-Ground Network** *Shiyuan Tong, Yun Liu, Jing Zhang, Zhenjiang Zhang, Bo Shen and Jian Li.*
E3 16:10 ~ 16:30	**Android Malware Detection Based on Static Behavior Feature Analysis** *Chen Chen, Yun Liu, Bo Shen and Junjun Cheng.*
E4 16:30 ~ 16:50	**Research of Unsupervised Entity Relation Extraction** *Yun Liu, Mingxin Li, Hui Liu and Junjun Cheng.*

CCITSA 2017 Program

Session F

Date: December 12, 2017 (Tuesday)
Time: 15:30~17:00
Room: Science and Engineering Building II – A127 room
Session chair: Zhenjiang Zhang

No.	Title & Authors
F1 15:30 ~ 15:50	**Microblog User Interest Mining based on Improved TextRank Model** *Rui Niu and Bo Shen.*
F2 15:50 ~ 16:10	**Services Preloading Scheme Based On Improved Threshold-PST In IOV** *Weihao Dong, Zhenjiang Zhang and Bo Shen.*
F3 16:10 ~ 16:30	**A improved Secure Data Transmission Protocol based on D2D for Mobile Health Systems** *Yanan Zhang and Haibing Mu.*
F4 16:30 ~ 16:50	**An improved Data Cache Timing Attack against RSA Based on Hidden Markov Model** *Chen Caisen, Yangxia Xiang, Du Jiaxing and Cheng Zhiwei.*