Session Information

December 10, 2015 (Thursday)			
Time	Content		
09:00~09:40	Registration		
09:40~10:00	Opening		
10:00~11:00	Keynote Speech		
11:00~12:40	CCITSA2015		
	Session A	Session C	Session E	Session G
12:40~13:30	Lunch		
13:30~16:30	CCITSA2015		
	Session B	Session D	Session F
17:30	Banquet		

Keynote Speech

Keynote Speaker: Prof . Yi-Bing Lin

Education

- B.S. in Electrical Engineering, National Cheng-Kung University, Taiwan, R.O.C. June 1983.
- Ph.D. in Computer Science University of Washington, Seattle, WA. August 1990. Thesis title: Understanding the Limits of Optimistic and Conservative Parallel Simulation (Thesis Advisor: Edward D. Lazowska).

Title: Computational Needs for Government Big Data Applications

Abstract: Under the open data policy, Taiwan government has proposed several public application domains, and computational tools for government big data applications are required for improving the government efficiency. The comprehensive analysis on historical and real-time big data also delivers huge business value, explores business intelligence, and assists in developing marketing strategies. This talk describes the government big data applications proposed by the Ministry of Science and Technology in Taiwan. We also show how cloud computing techniques can be utilized for enhancing the efficiency of government administration.

Author Biography

Yi-Bing Lin received his Bachelor's degree from National Cheng Kung University, Taiwan, in 1983, and his Ph.D. from the University of Washington, USA, in 1990. From 1990 to 1995 he was a Research Scientist with Bellcore (Telcordia). He then joined the National Chiao Tung University (NCTU) in Taiwan, where he remains. In 2010, Lin became a lifetime Chair Professor of NCTU, and in 2011, the Vice President of NCTU. Since 2014, Lin has been appointed as the Deputy Minister of Ministry of Science and Technology, Taiwan.

Lin is also an Adjunct Research Fellow, Institute of Information Science, Academia Sinica, Research Center for Information Technology Innovation, Academia Sinica, and a member of board of directors, Chunghwa Telecom. He serves on the editorial boards of IEEE Trans. on Vehicular Technology. He is General or Program

Chair for prestigious conferences including ACM MobiCom 2002. He is Guest Editor for several journals including IEEE Transactions on Computers. Lin is the author of the books *Wireless and Mobile Network Architecture* (Wiley, 2001), *Wireless and Mobile All-IP Networks* (John Wiley,2005), and *Charging for Mobile All-IP Telecommunications* (Wiley, 2008). Lin received numerous research awards including 2005 NSC Distinguished Researcher, 2006 Academic Award of Ministry of Education and 2008 Award for Outstanding contributions in Science and Technology, Executive Yuen, 2011 National Chair Award, and TWAS Prize in Engineering Sciences, 2011 (The World Academy of Sciences). He is in the advisory boards or the review boards of various government organizations including Ministry of Economic Affairs, Ministry of Education, and Ministry of Transportation and Communications. Lin is AAAS Fellow, ACM Fellow, IEEE Fellow, and IET Fellow.

Experience

- 2014.12-present: Acting Minister, MOST
- 2014.03-present: Deputy Minister, MOST
- 2014.01-2014.03: Deputy Minister, NSC
- 2011-2013: Senior Vice President, NCTU
- 2010-present: lifetime Chair Professor,NCTU
- 2007-2011: Dean, College of Computer Science, National Chiao Tung University (NCTU)
- 2004-2007: Dean (VP), Office of Research and Development, NCTU
- 2004-2010: Chair Professor, NCTU
- 2003-present: Adjunct Chair Professor, Providence University
- 2000-present: Adjunct Research Fellow, Academia Sinica.
- 1997-1999: Chairman, Department of Computer Science and Information Engineering (CSIE), NCTU
- 1995-present: Professor, CSIE, NCTU
- 1996: Deputy Director, Microelectronics and Information Systems Research Center, NCTU
- 1990-1995: Research Scientist, Bell Communications Research (Telcordia)

CCITSA2015 Program

Session A
Date: December 10, 2015 (Thursday)
Time: 11:00~12:40

Room: 格致大樓 E309

Session chair:

No.	Title Authors
A1 11:00 ≀ 11:20	**Realization of a Special Case of Indeterminate Finite Summation in Computer-Based Simulations** *Zhongli Wang, Shuping Dang and Abigail Edmonds.*
A2 11:20 ≀ 11:40	**A Quantitative Approach for Vulnerability Analysis of Urban Metro Network System** *Zhiru Wang, Guofeng Su and Jianguo Chen*
A3 11:40 ≀ 12:00	**Velocity inversion for sandstone reservoir based on extreme learning machine neural network** *Jianhua Cao and Jucheng Yang.*
A4 12:00 ≀ 12:20	**Fingerprint Creation Algorithm based-on Dimensionality reduction** *Tingting Yang and Shuwen Jia.*
A5 12:20 ≀ 12:40	**A Hybrid Algorithm for Frequent Pattern Mining Using MapReduce Framework** *Ting-Yun Chi, Chun-Yen Huang and Men-Chang Xin.*

Session B
Date: December 10, 2015 (Thursday)
Time: 13:30~15:00

Room:格致大樓 E309

Session chair:

No.	Title & Authors
B1 13:30 ≀ 13:50	**Base Station Assisted Device-to-Device Communications for Content Update Network** *Mingkai Chen, Jianxin Chen, Yujie Ma, Tao Yu and Zhifeng Wu.*
B2 13:50 ≀ 14:10	**Diffusion Estimation Algorithm for Mixtures of Factor Analyzers with Common Factor Loadings in Sensor Network** *Xin Wei, Yi Qian, Chaoping Lv, Tao Yu and Liang Zhou.*
B3 14:10 ≀ 14:30	**A Compressive Sampling Approach to Scene Change Detection** *Xuguang Zhang, Lei Wang, Zeqian Jin, Haitao Ling and Jiefeng Jin.*
B4 14:30 ≀ 14:50	**Prediction Model for User's QoE in Imbalanced Dataset** *Ruochen Huang, Xin Wei, Chaoping Lv, Xiaorui Li and Shengnan Zhang.*
B5 14:50 ≀ 15:10	**A Robust Background Registration Method Based On Multi Match Points** *Xuan Nie, Mingjia Liu and Peihao Li.*
B6 15:10 ≀ 15:30	**Protocol Stack Based Network Design and Realization** *Peihao Li.*
B7 15:30 ≀ 15:50	**An Application of Fuzzy Multi-Objective Linear Programming for Components Design of Games or Animated Characters** *Yih-Jou Tzang, Hong-Yi Chang, Chih-Hsuan Tzang, Ting-Yun Chi and Chun-Yen Huang.*
B8 15:50 ≀	**Sawtooth Wave Improved Evolved Bat Algorithm** *Pei-Wei Tsai, Jing Zhang, Yuan Liu, Yao He, Jeng-Shyang Pan and Ronghua Yang*

16:10	
B9 16:10 ⟨ 16:30	**An In-Mold Monitoring And Protecting System Of The Injection Molding Machine Using Offset Correction And Dynamic Safe Range Leraning Approch** *Jianjun Zhang*

CCITSA2015 Program

Session C
Date: December 10, 2015 (Thursday)
Time: 11:00~12:40

Room: 教齋大樓 404

Session chair:

No.	Title &Authors
C1 11:00 ≀ 11:20	**Material Intelligent Identification based on Hyperspectral Imaging and SVM** *Zhiyuan Shi, Shijie Dai, Zhibin Gao and Lianfen Huang.*
C2 11:20 ≀ 11:40	**Cluster-Based Timing Synchronization Method For Devive-to-Device Communication** *Lianfen Huang, Sichen Lin, Zhibin Gao, Ziwen Su and Baosheng Huang.*
C3 11:40 ≀ 12:00	**Firefly-inspired synchronicity algorithm with self-adaption coupling coefficient** Chuangbo Hao, Ping Song, Xiongjun Liu and Zhiqiang Pan.
C4 12:00 ≀ 12:20	**Technologis Review of Service Isolation in Smart Grid Communications** *Yong Yu, Hui Jiang, Gengshen Yu, Wantian Cao, Kun Wang and Guangjie Han.*
C5 12:20 ≀ 12:40	**Big Data Clustering based on Summary Statistics** Junsong Fu and Yun Liu

Session D
Date: December 10, 2015 (Thursday)
Time: 13:30~15:00

Room: 教齋大樓 404

Session chair:

No.	Title & Authors
D 1 13:30 ₹ 13:50	**The Dynamic Delay Scheduling Algorithm Based on Task Classification** *Bing Zhao, Yun Liu and Bo Shen.*
D 2 13:50 ₹ 14:10	**Integrated Data Fusion using Dempster-Shafer Theory** *Yang Zhang, Yun Liu and Qing-An Zeng.*
D3 14:10 ₹ 14:30	**An Efficient and Stable Route Protocol in Wearable Body Networks** *Chao Li and Zhenjiang Zhang.*
D4 14:30 ₹ 14:50	**An Evolutionary Approach to Detecting Elderly Fall in Telemedicine** *Fu-Xing Song, Zheng-Jiang Zhang, Feng Gao and Wen-Yu Zhang.*
D5 14:50 ₹ 15:10	**Genetic Algorithm Based Location Deployment Optimization of Small Cell with Marine Application** *Zhibin Gao, Canbin Chen, Lianfen Huang and Bin Wen.*
D6 15:10 ₹ 15:30	**A new method to predict the pupularity of the microblog** *Zemin Bao and Yun Liu.*
D7 15:30 ₹ 15:50	**Ray Tracing Based Wireless Channel Modeling over the Sea Surface Near Diaoyu Islands** *Zhibin Gao, Yanyang Wu, Canbin Chen, Lianfen Huang and Hao Sun.*
D8 15:50 ₹	**An Improved K-Means Using in Anomaly Detection** *Chunyong Yin.*

16:10	
D9 16:10 ≀ 16:30	**A New Classificaiton Method for Short Text Based on SLAS and CART** *Chunyong Yin*
D10 16:30 ≀ 16:50	**An Real-time Monitoring and Statistic System Using Hybrid Sensor Network** *Ning Sun, Guangjie Han, He Lu and Chen Lin*

CCITSA2015 Program

Session E
Date: December 10, 2015 (Thursday)
Time: 11:00~12:40

Room: 教奮大樓 405

Session chair:

No.	Title Authors
E1 11:00 ≀ 11:20	**The Research of Text Classification Technology Based on Improved Maximum Entropy Model** *Chunyong Yin*
E2 11:20 ≀ 11:40	**An Improved Transmission Control Protocol Effect on Router Performance** *Chunyong Yin.*
E3 11:40 ≀ 12:00	**Tan Xinchen and Xu Weijian. Network Packet Level based Video Quality Assessment Metric** *Feng Chao, Huang Lianfeng,*
E4 12:00 ≀ 12:20	**Research on image semantic communication and retrieval based on massive resource pool of Internet** *Fan Xincan and Wen Xiao-Jun.*
E5 12:20 ≀ 12:40	**Human Behavior Recognition: Semantics-based Text Copy Detection Method** *Liu Yang.*

Session F
Date: December 10, 2015 (Thursday)
Time: 13:30~15:00

Room: 教齒大樓 405

Session chair:

No.	Title & Authors
F1 13:30 ≀ 13:50	**Semantic-based searchable encryption in cloud: issues and challenges** *Jianjun Zhang.*
F2 13:50 ≀ 14:10	**A Mutual Authentication Security RFID Protocol Based on Time Stamp** *Changlun Zhang, Wenqi Zhang and Haibing Mu.*
F3 14:10 ≀ 14:30	**Partition-Based Building Energy Analysis and Optimization of Energy Conservation** *Lin Zhang.*
F4 14:30 ≀ 14:50	**Research on Fast Smog Free Algorithm on Single Image** *Lin Zhang and Xiaoping Li.*
F5 14:50 ≀ 15:10	**A Lightweight Mutual Authentication Scheme for User and Server in Cloud** *Jian Shen, Dengzhi Liu, Shaohua Chang, Jun Shen and Debiao He.*
F6 15:10 ≀ 15:30	**Performance Comparison of Typical and Improved LEACH protocols in Wireless Sensor Network** *Jian Shen, Anxi Wang, Chen Wang, Yongjun Ren and Jin Wang.*
F7 15:30	**A Novel Sensors-based and Multiple Warning Early Fatigue Detection System Architecture**

≀ 15:50	*Jian Shen, Dengzhi Liu, Jun Shen, Sai Ji and Jin Wang.*
B8 15:50 ≀ 16:10	**Privacy Preserving Search Schemes over Encrypted Cloud Data: A Comparative Survey** *Jian Shen, Dengzhi Liu, Jun Shen, Haowen Tan and Debiao He.*
F9 16:10 ≀ 16:30	**Privacy Preserving Search Schemes over Encrypted Cloud Data: A Comparative Survey** *Jian Shen, Dengzhi Liu, Jun Shen, Haowen Tan and Debiao He.*
F10 16:30 ≀ 16:50	**A Global and Dynamitic Route Planning Application for Smart Transportation** *Ning Sun, Guangjie Han and Pengfei Duan*

CCITSA2015 Program

Session G
Date: December 10, 2015 (Thursday)
Time: 11:00~12:40

Room: 教啬大樓 403

Session chair:

No.	Title Authors
G1 11:00 ≀ 11:20	**Privacy Preserving Search Schemes over Encrypted Cloud Data: A Comparative Survey** *Jian Shen, Dengzhi Liu, Jun Shen, Haowen Tan and Debiao He.*
G2 11:20 ≀ 11:40	**Application of Analytic Hierarchy Process to Evaluation on Quality of Atmospheric Environment in Nanjing City** *Yan Li, Rang-Hui Wang and Sai Ji.*
G3 11:40 ≀ 12:00	**A Survey on Key Management for Body Sensor Network** *Shaohua Chang, Sai Ji, Jian Shen, Dengzhi Liu and Haowen Tan.*
G4 12:00 ≀ 12:20	**Auditing Protocols for Cloud Storage: A Comparative Survey** *Jun Shen, Sai Ji, Jian Shen, Zhangjie Fu and Jin Wang.*