

October 18 (Tuesday)

Tuesday AM

TueAM-1 Data Mining and Cybersecurity Workshop 1

Chair: Tao Ban, Paul Pang, Kaizhu Huang

Room: International Conference Hall I

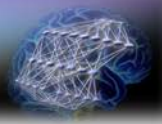
Invited talk

10:20 - 11:00 Cyber-security Information Sharing with Data Correlation
Koji Nakao^{1,2}
¹Distinguished Researcher, Cybersecurity Research Institute
National Institute of Information and Communications Technology,
²Information Security advisor, KDDI

11:00 - 11:20 Botnet Detection Using Graphical Lasso with Graph Density
Chansu Han¹ Kento Kono¹ Shoma Tanaka¹ Masanori
Kawakita¹ Jun'ichi Takeuchi¹
¹Graduate School of ISEE, Kyushu University

11:20 - 11:40 The Usability of Metadata for Android Application Analysis
Takeshi Takahashi¹, Tao Ban¹, Chin-Wei Tien², Chih-Hung
Lin², Daisuke Inoue¹, Koji Nakao¹
¹National Institute of Information and Communications
Technology, ²Institute for Information Industry

11:40 - 12:00 Preserving Privacy of Agents in Reinforcement Learning for
Distributed Cognitive Radio Networks
Geong Sen Poh¹, Kok-Lim Alvin Yau²
¹MIMOS Berhad ²Sunway University



Tuesday PM1

TuePM1-1 Data Mining and Cybersecurity Workshop 2

Chair: Tao Ban, Paul Pang, Kaizhu Huang

Room: International Conference Hall I

Invited talk

The emerging era of Cognitive Big Data Informatics: Some Case Studies and future Directions

Amir Hussain^{1,2}

13:00 - 13:40 ¹Director, Cognitive Big Data Informatics (CogBID) Laboratory,

²Division of Computing Science and Mathematics, University of Stirling, Stirling FK9 4LA, UK

13:40 - 14:00 winner presentation

14:00 - 14:20 Campus Wireless LAN Usage Analysis and Its Applications

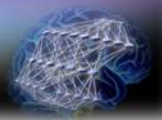
Kensuke Miyashita¹, Yuki Maruno¹

¹Kyoto Women's University

14:20 - 14:40 MDL Criterion for NMF with Application to Botnet Detection

Shoma Tanaka¹, Yuki Kawamura², Masanori Kawakita¹,
Noboru Murata³, Jun'ichi Takeuchi¹

¹Graduate School of ISEE Kyushu University ²Nihon Unisys, Ltd. ³Waseda University



Tuesday PM2

TuePM2-1 Data Mining and Cybersecurity Workshop 3

Chair: Tao Ban, Paul Pang, Kaizhu Huang

Room: International Conference Hall I

15:20 - 15:40 A Brief Review of Spin-glass Applications in Unsupervised and Semi-supervised Learning
Lei Zhu¹, Kazushi Ikeda², Paul Pang¹, Ruibin Zhang¹, Abdolhossein Sarrafzadeh¹
¹Unitec Institute of Technology, New Zealand ²Nara Institute of Science and Technology

15:40 - 16:00 Learning Latent Features with Infinite Non-negative Binary Matrix Tri-factorization
Xi Yang¹ Kaizhu Huang¹ Rui Zhang¹ Amir Hussain²
¹Xi'an Jiaotong-Liverpool University ²University of Stirling

16:00 - 16:20 A Novel Manifold Regularized Online Semi-Supervised Learning Algorithm
Shuguang Ding¹, Xuanyang Xi², Zhiyong Liu², Hong Qiao², Bo Zhang³
¹Institute of Applied Mathematics, AMSS, Chinese Academy of Sciences ²State Key Lab of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences ³LSEC and Institute of Applied Mathematics, AMSS, Chinese Academy of Sciences

16:20 - 16:40 Learning from Few Samples with Memory Network
Shufei Zhang¹, Kaizhu Huang¹
¹Xi'an Jiaotong-Liverpool Univ.

16:40 - 17:00 Generalized Compatible Function Approximation for Policy Gradient Search
Yiming Peng¹, Gang Chen¹, Mengjie Zhang¹, Paul Pang²
¹Victoria University of Wellington ²Unitec Institute of Technology, New Zealand

17:00 - 17:20 A Combo Object Model for Maritime Boat Ramps Traffic Monitoring
Paul pang¹
¹Unitec Institute of Technology, New Zealand
