

# Presentation Schedule

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**Session ID:** A1  
**Session Title:** Adversarial Learning and Security  
**Date/Time:** 4 Dec, 2020, 13:30-15:30  
**Venue:** Room 1

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- 4027 Hyperspectral Image Classification Approach Based On Wasserstein Generative Adversarial Networks**  
Naigeng Chen, Chenming Li
- 2504 Color-Comics-Image Sketch-Style Transformation Based On Conditional Generative Adversarial Network**  
Mingqiang Shi, Kintak U
- 2505 Sensitivity Based Robust Learning In Adversarial Environment**  
Qing Lin, Wei Li, Patrick Chan
- 2503 Matryoshka Attack: Research On An Attack Method Of Recommender System Based On Adversarial Learning And Optimization Solution**  
Huibin Wang, Junyan Zhong, Kintak U
- 6015 Dual-Path Model For Person Re-Identification With Cloth Changing**  
Junhao Zheng, Xiaoman Hu, Tianyi Xiang, Patrick Chan
- 2015 Construction Plant Security Detection And Risk Assessment System**  
Runbin Chen, Hao Yu, Rui Liu, Ruixin Tang, Fangyuan Xu
- 6016 Segmentation Based Backdoor Attack Detection**  
Natasha Kees, Yaxuan Wang, Yiling Jiang, Fang Lue, Patrick Chan
- 2501 Image Colored-Pencil-Style Transformation Based On Generative Adversarial Network**  
Haitao Chen, Kintak U

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**Session ID:** A2  
**Session Title:** Computer Version  
**Date/Time:** 4 Dec, 2020, 13:30-15:30  
**Venue:** Room 2

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- 4062 Multi-Tensor Fusion Network With Hybrid Attention For Multimodal Sentiment Analysis**  
Haiwei Xue, Xueming Yan, Shengyi Jiang, Helang Lai
- 6009 Bert-Pair-Networks For Sentiment Classification**  
Ziwen Wang, Haiming Wu, Han Liu, Qian-Hua Cai
- 2506 Face Rotation Angle Identification With Ensemble Learning**  
Zi-Yang Zhou, Keke Chen, Patrick Chan
- 6004 Object Recognition Using Enhanced Particle Swarm Optimization Algorithms**  
Michael Willis, Li Zhang, Han Liu, Hailun Xie, Kamlesh Mistry
- 2017 Human Motion Capture Technology Based On Multi-Binocular Vision And Image Recognition**  
Weile Zhang, Kaizhu Yang, Tang Yi, Junpeng Yang, Xin Liang, Yiliang Fan, Qintao Du
- 4010 Hybrid Separable Convolutional Inception Residual Network For Human Facial Expression Recognition**  
Xinqi Fan, Qureshi Rizwan, Ali Shahid, Jianfeng Cao, Luoxiao Yang, Hong Yan
- 4029 Video-Based Vehicle Flow Detection Algorithm**  
Cheng Xu, Genlin Ji, Bin Zhao
- 4032 A Study On Two-Stage Approach For Traffic Sign Recognition: Few-To-Many Or Many-To-Many?**  
Hsieh Meng-Huan, Zhao Qiangfu

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**Session ID:** A3  
**Session Title:** Biometrics  
**Date/Time:** 4 Dec, 2020, 13:30-15:30  
**Venue:** Room 3

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- 6003 A Deep Learning Based Wearable Healthcare Iot Device For Ai-Enabled Hearing Assistance Automation**  
Fraser Young, Li Zhang, Richard Jiang, Han Liu, Conor Wall
- 2006 A Dna-Binding Proteins Prediction Model Using Different Property Distance Transformation**  
Xiangyu Li, Lina Yang, Yuan Yan Tang, Patrick Wang
- 4031 A Multiple Deep Learner Approach For X-Ray Image-Based Pneumonia Detection**  
Zong Ye Yang, Qiang Fu Zhao
- 4050 Detection Of Stress For Visually Impaired People Using Eeg Signals Based On Time-Frequency Domain Analysis**  
Samia Sultana, Md Anisur Rahman, Mohammad Zavid Parvez
- 4051 Detection Of Brain Tumor And Identification Of Tumor Region Using Deep Neural Network On Fmri Images**  
Afsara Mashiat, Reza Rifat Akhlaque, Fahmeda Hasan Fariha, Tanzim Reza, Md Anisur Rahman, Mohammad Zavid Parvez
- 4052 Parkinson'S Disease Detection Using Fmri Images Leveraging Transfer Learning On Convolutional Neural Network**  
Asaduzzaman Sajeeb, A.F.M. Nazmus Sakib, Sanjida Ali Shushmita, S. M. Ashraf Kabir, Md Tanzim Reza, Mohammad Zavid Parvez
- 4053 Semantic Segmentation Of Brain Tumor From 3D Structural Mri Using U-Net Autoencoder**  
Maisha Farzana, Md Jahid Hossain Any, Md Tanzim Reza, Mohammad Zavid Parvez
- 4063 Prediction Of Coronary Artery Disease Using Electrocardiography: A Machine Learning Approach**  
Gautam Phadke, Mohammed Reza Rajati, Leena Phadke

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**Session ID:** A4  
**Session Title:** Machine Learning and its Application 1  
**Date/Time:** 4 Dec, 2020, 13:30-15:30  
**Venue:** Room 4

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- 4065 Distribution System For Japanese Synthetic Population Data With Protection Level**  
Tadahiko Murata, Susumu Date, Yusuke Goto, Toshihiro Hanawa, Takuya Harada,  
Manabu Ichikawa, Hao Lee, Masaharu Munetomo, Akiyoshi Sugiki
- 2013 A Machine Learning Model On Bids Submission For Power Demand Response (Dr)  
Resources In Gas Market**  
Ting Jin, Zhengxin Fu, Jiejun Chen, Yinglong Lv, Qiang Sun, Fangyuan Xu
- 6002 Sentiment Analysis Of Online Product Reviews Based On Senbert-Cnn**  
Fangyu Wu, Zhenjie Shi, Zhaowei Dong, Chaoyi Pang, Bailing Zhang
- 6007 In-House Deep Environmental Sentience For Smart Homecare Solutions Toward Ageing  
Society**  
Feiyu Qiang, Ziping Jiang, Philip Easom, Ahmed Bouridane, Li Zhang, Richard Jiang
- 4005 The Realization Of Cross-Media Knowledge Graph Of Tang And Song Poetry**  
Changti Wu, Chunfang Li, Wenjuan Jiang
- 4002 Imbalanced Toxicity Prediction Using Multi-Task Learning And Over-Sampling**  
Jincheng Li
- 4023 Identification Of Inverted Pendulum System Using Frequency Domain Maximum  
Likelihood Estimation**  
Siting Zou, Qing Sun, Dajun Du
- 4034 Development Of A Drawing Assistant System For Blind Users Using An Object-  
Oriented Graphic Description Language**  
Noboru Takagi, Takashi Suzuki, Tomoyuki Araki
- 4035 Applying A Genetic Algorithm To Determine Premium Rate Of Occupational Accident  
Insurance**  
Jia-Ching Ying, Chi-Kai Chang, Yen-Ting Chang

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**Session ID:** B1  
**Session Title:** Wavelet Analysis and Intelligent Control  
**Date/Time:** 4 Dec, 2020, 15:45-17:45  
**Venue:** Room 1

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- 2005 Comparison Of Rna Secondary Structure Using Discrete Wavelet Transform And Fractal Dimension**  
Yang Liu, Lina Yang, Yuan Yan Tang, Patrick Wang
- 6005 Brain-Controlled Robot-Arm Prosthetic Via Embedded Deep Learning From Semg Sensors Made With 3D Printer**  
David Lonsdale, Li Zhang, Richard Jiang
- 2009 Application Of Synchroqueezing Wavelet Transform In Bolt Anchorage Detection Signal Analysis**  
Xiao-Yun Sun, Jia-Qi Dong, Wen-Lian Zhang, Hui Xing
- 2023 Digital Image Watermarking Method Using The Gyrator And Dyadic Wavelet Transforms**  
Arata Ide, Ryuji Ohura, Teruya Minamoto
- 4033 Uncertainty-Observer-Based Dynamic Sliding Mode Formation Control Of Multi-Agent Systems**  
Yang Fei, Xin Yuan, Peng Shi, Cheng-Chew Lim
- 4049 Dynamic Multi-Target Assignment With Decentralised Online Learning To Achieve Multiple Synchronised Goals**  
Duong Nguyen, Arvind Rajagopalan, Jijoong Kim, Cheng-Chew Lim, David Hubczenko
- 4067 A Modified Q-Learning Algorithm For Control Of Two-Qubit Systems**  
Omar Shindi, Qi Yu, Daoyi Dong, Jiangjun Tang
- 4015 Linear Parameter Varying Control Of Wind Energy Conversion Systems In Partial Load**  
Jing Xu, Qing Sun

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**Session ID:** B2  
**Session Title:** Multimedia  
**Date/Time:** 4 Dec, 2020, 15:45-17:45  
**Venue:** Room 2

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- 2502 Low-Light Image Enhancement Algorithm Based On Lime With Pre-Processing And Post-Processing**  
Bowen Zeng, Kintak U
- 2018 Optimized Algorithm Of Human 3D Motion Recognition Based On Hog And Lbp**  
Xin Liang, Junpeng Yang, Tang Yi, Kaizhu Yang, Weile Zhang, Yiliang Fan, Peijie Li
- 6001 A Watershed-Based Intelligent Scissors Approach For Interactive Semi-Automated Pulmonary Lobes Segmentation**  
Qiang Li, Yan Kang
- 6006 Comparative Study Of Speech Emotion Recognition Based On Cnn And Crnn**  
Nan Jiang, Junwei Jia, Dongmei Shao
- 4046 Transfer Learning With Shapeshift Adapter: A Parameter-Efficient Module For Deep Learning Model**  
Jingyuan Liu, Mohammad Rajati
- 4064 Improving Self-Attention Based News Recommendation With Document Classification**  
Haowen Ke
- 4069 Comparative Study Of Speech Emotion Recognition Based On Cnn And Crnn**  
Nan Jiang, Junwei Jia
- 4057 Color-Dust: A Data Visualization Application Of Image Color Based On K-Means Algorithm**  
Yang Rui, Li Chunfang, Wen Yujun
- 4011 A Novel Chinese Reading Comprehension Model Based On Attention Mechanism And Convolutional Neural Networks**  
Chin-Shyurng Fahn, Yi-Lun Wang, Chu-Ping Lee, Meng-Luen Wu

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**Session ID:** B3  
**Session Title:** Machine Learning  
**Date/Time:** 4 Dec, 2020, 15:45-17:45  
**Venue:** Room 3

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- 6010 A Fast Reduction Algorithm With Attribute Pre-Sort Based On Neighborhood Rough Set**  
Meng Hu, Eric C.C. Tsang, Yanting Guo, Weihua Xu, Degang Chen
- 2022 Overview And Comparison Of Common Load Identification Models For Non-Intrusive Load Detection**  
Qintao Du, Peijie Li, Yijie Huang, Weixian Chen, Zelun Lin
- 6011 Supervised Neighborhood Based Ensemble Attribute Reduction**  
Jingjing Song, Zehua Jiang, Huili Dou, Eric C. C. Tsang
- 6008 Novel Class Detection Using Hybrid Ensemble**  
Diptangshu Pandit, Li Zhang, Kamlesh Mistry, Richard Jiang
- 2014 A Neural Network Prediction Model On Multiple Error Dimension Integration**  
Hao Yu, Ruixin Tang, Rui Liu, Runbin Chen, Fangyuan Xu
- 2012 Sparse Convolution Subspace Clustering**  
Chuan Luo, Linchang Zhao, Taiping Zhang
- 4055 Operating System Classification: A Minimalist Approach**  
Kyle Millar, Adriel Cheng, Hong Gunn Chew, Cheng-Chew Lim
- 4071 A Three-Stage Method For Classification Of Binary Imbalanced Big Data**  
Junhai Zhai
- 4072 Feature Selection For Big Data Based On Mapreduce And Voting Mechanism**  
Sufang Zhang, Junhai Zhai

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**Session ID:** B4  
**Session Title:** Machine Learning and its Application 2  
**Date/Time:** 4 Dec, 2020, 15:45-17:45  
**Venue:** Room 4

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- 4056 Feature Selection On Imbalanced Data And Its Application On Toxicity Prediction**  
Jincheng Li
- 2016 Utilizing Contextualized Word Embeddings For Text Matching**  
Hao Yu, Xiaoyang Chen, Ying Zhou
- 4019 Research On Hotspot Mining Method Of Twitter News Report Based On Lda And Sentiment Analysis**  
Lingfei Zhang, Chunfang Li
- 4038 Conservative Generalisation For Small Data Analytics - An Extended Lattice Machine Approach**  
Shuangshuang Kong, Hui Wang, Kaijun Wang
- 2019 Applications Of Feature Weighted Fuzzy C-Means Clustering And Genetic Algorithm Optimization For Load Identification In Nilm Systems**  
Peijie Li, Qintao Du, Yiliang Fan, Jie Yi, Xin Liang, Weile Zhang
- 4003 Behavioral Decision Makings: Reconciling Behavioral Economics And Decision Systems**  
Junyi Chai
- 4058 Digitalization Of Electronic Textbook Based On Opencv**  
Zhiming Deng, Minyong Shi, Chunfang Li
- 4068 Detection Of Modulated Motor Cortex Using Anodal And Cathodal Tdcs Based Neurofeedback**  
Zarif Ahmed Chowdhury, Dewan Nahidul Alam, Md. Abu Fattah Hossain Bhuiyan Nahid, Md Anisur Rahman, Mohammad Zavid Parvez
- 2011 Selection Of Variables And Indicators In Financial Distress Prediction Model-Svm Method Based On Sparse Principal Component Analysis**  
Sen Zeng, Wanjun Yang