

Thursday, November 26

Thursday, November 26 7:30 - 8:30

Registration

Thursday, November 26 8:30 - 8:50

Opening ceremony

Thursday, November 26 8:50 - 9:50

Keynote speech #1

Thursday, November 26 9:50 - 10:20

Coffee break

Thursday, November 26 10:20 - 12:20

CN1: Communication and Networking

Room: I.41

[\*\*Jointly Optimized Cache Control and Energy Efficiency for Downlink Cellular Networks\*\*](#)  

[Nguyen Tat Dat, Truong Quang Phuc, Duy Tan Do and Hoc Phan](#)

[\*\*Secured Scheme for RF Energy Harvesting Mobile Edge Computing Networks Based on NOMA and Access Point Selection\*\*](#) 



[Truong Van Truong and Dac-Binh Ha](#)

[\*\*Real-Time Online Learning for Pattern Reconfigurable Antenna State Selection\*\*](#)  

[Xaime Rivas Rey, Geoffrey Mainland and Kapil Dandekar](#)

[\*\*Prediction of Forest Fire Risk to Trigger IoTs Reconfiguration Action\*\*](#)  

[Tuan Nguyen-Anh and Quan Le-Trung](#)

[\*\*A Novel Machine Learning-Based Network Intrusion Detection System for Software-Defined Network\*\*](#)  

[Duc-Huy Le and Hai Anh Tran](#)

[\*\*DDoS Attack Detection and Defense in SDN Based on Machine Learning\*\*](#)  

[Tan Khang Luong, Trung Dung Tran and Thanh Le](#)

CS1: Foundations of Computer Science

Room: Hall I

[\*\*A New High Performance Approach for Crowd Counting Using Human Filter\*\*](#)  

[Phuc Thinh Do and Ngoc Quoc Ly](#)

[\*\*Solve Systems of Ordinary Differential Equations Using Deep Neural Networks\*\*](#)  

[Binh T Nguyen, Trung Nguyen, Thanh Nguyen and Binh Pham](#)

[\*\*Vietnamese Context-Sensitive Malicious Spelling Error Correction\*\*](#)  

[Thuy Linh Nguyen, Phuoc Ban Dao, Duc-Vu Nguyen and Ngan L.T. Nguyen](#)

[\*\*Mobile Robot Planner with Low-Cost Cameras Using Deep Reinforcement Learning\*\*](#)  

[Minh Quang Tran and Ngoc Quoc Ly](#)

[Using Anonymous Protocol for Privacy Preserving Deep Learning Model](#)  

[Tu Anh Tran](#), [Van Nam Huynh](#) and [Dang Viet Hung](#)

[A Scalable - High Performance Lightweight Distributed File System](#)  

[Quang Minh Nguyen](#), [Tu Minh Doan](#) and [Tien Dinh](#)

## SE1: Software Engineering

Room: I.23

[Understanding Learning Behaviours in Sorting Algorithm Game](#)  

[Alfa R Yohannis](#), [Paramaresthi Windriyani](#) and [Henri Septanto](#)

[Mining and Creating Software Repositories Dataset](#)  

[Do Thai Bao](#), [Huu-Nghia H. Nguyen](#), [Bao Linh Mai](#) and [Vu Nguyen](#)

[Social Constraints-Based Socially Aware Navigation Framework for Mobile Service Robots](#)  

[Van Bay Hoang](#), [Van Hung Nguyen](#), [Nguyen Lan Anh](#) and [Xuan-Tung Truong](#)

[Toward Socially Aware Trajectory Planning System for Autonomous Mobile Robots in Complex Environments](#)  

[Van Hung Nguyen](#), [Van Bay Hoang](#) and [Xuan-Tung Truong](#)

[Generating Test Data for Energy Property in Mobile Applications](#)  

[Anh Tu Bui](#), [Van-Viet Nguyen](#) and [Thuan Truong](#)

[Automated Waste Sorting Using Convolutional Neural Network](#)  

[Minh-Hieu Huynh](#), [Phu-Thinh Pham-Hoai](#), [Kiệt Anh Trần](#) and [Dat Thanh Nguyen](#)

Thursday, November 26 12:20 - 1:30

Lunch break

Thursday, November 26 1:30 - 2:30

Keynote speaker #2

Thursday, November 26 2:30 - 3:00

Coffee break

Thursday, November 26 3:00 - 5:00

## CI1: Computational Intelligence

Room: Hall I

[Development of Warning and Predicting System for Quality of Air in Smart Cities Using RNN](#)   

[Phat Nguyen Huu](#), [Hung Duong](#) and [Hiep Le](#)

[On an Improvement of Graph Convolutional Network in Semi-Supervised Learning](#)  

[Man Ngo](#), [An Mai](#) and [Bui Thanh](#)

[VGG Deep Neural Network Compression via SVD and CUR Decomposition Techniques](#)  

[An Mai](#)

[Comparing U-Net Convolutional Network with Mask R-CNN in Agricultural Area Segmentation on Satellite Images](#)  

[Thinh Pham Quoc Tran](#), [Tam Linh Tran](#) and [Thu Tran Minh Nguyen](#)

[Comparing Machine Translation Accuracy of Attention Models](#)   

[Pham Tuan Dat](#) and [Duy Ngoc Pham](#)

[Multi-Branch Network with Dynamically Matching Algorithm in Pre-Identification](#)  

[Thang\\_Viet\\_Dao](#)

## CI2: Computational Intelligence

Room: I.23

[Land-Cover Mapping from Sentinel Time-Series Imagery on the Google Earth Engine: A Case Study for Hanoi](#)  

[Nam Bui](#), [Anh Phan](#) and [Thanh Nguyen](#)

[An Alternative Lightness Control with GAN for Augmenting Camera Data](#)  

[Phan Tan Phuc](#) and [Dung Nguyen](#)

[Systematic Evaluation of Deep Learning Models for Human Activity Recognition Using Accelerometer](#)  

[Thu-Hien Le](#), [Quang-Huy Tran](#) and [Thi-Lan Le](#)

[Integrating AMR to Neural Machine Translation Using Graph Attention Networks](#)  

[Long H. B. Nguyen](#), [Viet Pham](#) and [Dinh Dien](#)

[Transformer-Based Model for Vietnamese Handwritten Word Image Recognition](#)  

[Loi Vinh Ly](#), [Tuan Doan](#) and [Ngoc Quoc Ly](#)

[Exploring Document-Level Neural Machine Translation for English-Vietnamese](#)  

[Duc Truong](#), [Thang Hong Nguyen-Vo](#), [Long H. B. Nguyen](#) and [Dinh Dien](#)

## CI3: Computational Intelligence

Room: I.41

[Initialize the Centroids Based on Gravitational Force Using Kernel Function for Multidimensional Data Classification](#)  

[Dinh Sinh Mai](#)

[Vietnamese Speech Synthesis with End-To-End Model and Text Normalization](#)  

[Do Tri Nhan](#), [Nguyen Minh Tri](#) and [Cao Xuan Nam](#)

[Lightweight Solution to Background Noise in Crowd Counting](#)  

[Thien Thai](#) and [Ngoc Quoc Ly](#)

[Recognize Vietnamese Sign Language Using Deep Neural Network](#)  

[Long Huynh](#) and [Viet Ngo](#)

[Saliency Detection by Superpixel Ranking for Person Re-Identification](#)  

[Chau Dang](#), [Tien Ho Phuoc](#) and [Nghie Truong](#)

[An Investigation of Ensemble Methods to Classify Electroencephalogram Signaling Modes](#)  

[Hoang-Thuy-Tien Vo](#), [Huynh Quoc Viet](#) and [Tuan Van Huynh](#)

Thursday, November 26 6:00 - 9:00

Banquet

Friday, November 27

Friday, November 27 8:00 - 9:40

CI4: Computational Intelligence

Room: Hall I

**[Vision-Based Navigation for Autonomous Landing System](#)**  

[Phuoc Hong Nguyen](#), [Tri Ngo](#), [Long Duong](#) and [Tinh Tran](#)

**[A Study of Finger Movement Classification Based on 2-sEMG Channels](#)**  

[Nguyen Thi Le Thuy](#), [Phuc Viet Ho](#) and [Tuan Van Huynh](#)

**[Text-Type Variation in Vietnamese: Corpus Mining for Linguistic Features in Narrative and Non-Narrative Genres](#)**  

[Nhu Vo Diep](#), [Thuy Bui](#) and [Dinh Dien](#)

**[Deep Reinforcement Learning Based Socially Aware Mobile Robot Navigation Framework](#)**  

[Do Nam Thang](#), [Trung Dung Ngo](#) and [Xuan-Tung Truong](#)

**[Analysis of Chatbot-Based Image Classification on Social Commerce LINE@ Platform](#)**  

[Jennifer Nangoy](#) and [Nabila Shabrina](#)

## CI5: Computational Intelligence

Room: I.23

**[Online Video Stabilization Based on Converting Deep Dense Optical Flow to Motion Mesh](#)**  

[Luan Tan Tran](#) and [Ngoc Quoc Ly](#)

**[Local Binary Pattern and Census, Which One is Better in Stereo Matching](#)**  

[Vinh Dinh Nguyen](#), [Phuc Hong Nguyen](#) and [Narayan Debnath](#)

**[Vehicle Detection at Night Time](#)**  

[Ngoc Ho](#), [Mai Pham](#), [Nguyen D. Vo](#) and [Khang Nguyen](#)

**[The Effects of Super-Resolution on Object Detection Performance in an Aerial Image](#)**  

[Ngan Tuan Truong](#), [Nguyen D. Vo](#) and [Khang Nguyen](#)

**[Stereo Domain Translation for Denoising and Super-Resolution Using Correlation Loss](#)**  

[Vinh Quang Dinh](#), [Duc Tuan Nguyen](#) and [Phuc Hong Nguyen](#)

## CI6: Computational Intelligence

Room: I.41

**[Towards an Ontology-Based Knowledge Base for Job Postings](#)**  

[Thi Pham Quynh](#), [Thi Diep Ho](#), [Thao Nguyen Dinh](#), [Cuong Pham-Nguyen](#), [Thang Le Dinh](#) and [Nam Le Nguyen Hoai](#)

**[VQASTO: Visual Question Answering System for Action Surveillance Based on Task Ontology](#)**  

[Huy Quoc Vo](#), [Tien-Hao Phung](#) and [Ngoc Quoc Ly](#)

**[Improving Recommendation Accuracy Using Cross-Domain Similarity](#)**  

[Pradeep Singh](#), [Pijush Kanti Dutta Pramanik](#), [Samriddhi Mishra](#), [Anand Nayyar](#), [Divyanshu Shukla](#) and [Prasenjit Choudhury](#)

**[Lightweight Network for Vietnamese Landmark Recognition Based on Knowledge Distillation](#)**  

[Viet Trung Tran](#), [Nam Le](#), [Phong Nguyen](#) and [Thinh Doan](#)

**[SRGAN with Total Variation Loss in Face Super-Resolution](#)**  

[Hai Nguyen-Truong](#), [Khoa N. A. Nguyen](#) and [San Cao](#)

Friday, November 27 9:40 - 10:10



Coffee break



Friday, November 27 10:10 - 11:50



## CI7: Computational Intelligence

Room: Hall I

**[VNLawBERT: A Vietnamese Legal Answer Selection Approach Using BERT Language Model](#)**    
[Nguyen Chieu Chau](#), [Son Truong Nguyen](#) and [Minh Le Nguyen](#)

**[Fine-Tuning BERT for Sentiment Analysis of Vietnamese Reviews](#)**    
[Quoc Thai Nguyen](#), [Thoai Linh Nguyen](#), [Ngoc Hoang Luong](#) and [Quoc Hung Ngo](#)

**[Facial Expression Recognition in the Wild: Efficiency of Modified-Category and Ensemble Learning Method](#)**    
[Bao Bui-Xuan](#), [Bao-Minh Nguyen-Hoang](#), [Cong-Anh Truong](#) and [Quang-Duy Nguyen-Tran](#)

**[Vietnamese Facebook Posts Classification Using Fine-Tuning BERT](#)**    
[Dung Tran Tuan](#), [Dang Van Thin](#), [Van-Hau Pham](#) and [Ngan L.T. Nguyen](#)

**[Efficient One-Shot Video Object Segmentation](#)**    
[Nhat Hoang-Xuan](#), [E-Ro Nguyen](#), [Thuy-Dung Pham-Le](#) and [Nguyen-Khoi Hoang](#)

## CI8: Computational Intelligence

Room: I.23

**[An EfficientNet-Like Feature Extractor and Focal CTC Loss for Image-Base Sequence Recognition](#)**    
[Dinh Sang](#) and [Hoang Thuan Nguyen](#)

**[Transfer Learning for Macroeconomic Forecasting](#)**    
[Hien T. Nguyen](#) and [Duc Trung Nguyen](#)



**[A Pose Estimation Method for Multiple Identity Cards Based on Corner Heatmaps and Part Affinity Fields](#)**    
[Dinh Sang](#) and [Phuong Nam Tran](#)

**[GAN Generated Portraits Detection Using Modified VGG-16 and EfficientNet](#)**    
[Kha-Luan Pham](#), [Khanh-Mai Dang](#), [Loi-Phat Tang](#) and [Thanh-Nhan Nguyen](#)

**[Vehicle Counting: Survey and Experiments](#)**    
[Phong Hoang La](#), [Minh-Thao Ha](#), [Long Bao Hai Nguyen](#) and [Nguyen Manh Thien](#)

## CI9: Computational Intelligence

Room: I.41

**[Hit Song Prediction Based on Gradient Boosting Decision Tree](#)**    
[Bang-Dang Pham](#), [Triet Minh Tran](#) and [Hoang-Long Pham](#)

**[Sentiment Analysis Implementing BERT-Based Pre-Trained Language Model for Vietnamese](#)**    
[Trong-Loc Truong](#), [Hanh-Linh Le](#) and [Thien-Phuc Le-Dang](#)

**[A Hybrid Approach for Neural Collaborative Filtering](#)**    
[Phong Hai Tran](#), [Hai Thanh Nguyen](#) and [Ngoc-Thao Nguyen](#)

**[Temporal Variation of Salinity at Different Locations in the Vietnamese Mekong Delta Using Landsat 8 OLI Imagery](#)**    
[Chien Van Pham](#), [Giang Van Nguyen](#), [Tran Phuong Anh](#) and [Phong V. V. Le](#)

**[A Novel Watermarking Scheme Based on the Curvelet Transformation Method for Medical Images](#)**    
[Thu-Huong Phan](#), [Van-Hau Bui](#), [Nguyen Anh](#) and [Trong-Minh Hoang](#)

Friday, November 27 1:30 - 3:30

SS #1: Emerging Technologies for 6G

Room: I.23

**[Physical Layer Security in Multi-Hop Relay Networks with Modified Dijkstra's Routing Algorithms](#)**  

[Nguyen Thi Yen Linh](#), [Chan Dai Truyen Thai](#), [Vo Nguyen Quoc Bao](#) and [Huynh Hoa](#)

**[Uplink Non-Orthogonal Multiple Access Protocol in Two-Way Relaying Networks: Realistic Operation and Performance Analysis](#)**  

[Thu-Thuy Thi Dao](#) and [Ngoc Son Pham](#)

**[Bit-Error Rate Analysis of Relay-Based DF Cooperative Diversity Systems Considering Multipath Fading Channels Along with Non-Identical Interferers](#)**  

[Rami Mohaisen](#), [Mamoun F. Al-Mistarihi](#) and [Khalid A. Darabkh](#)

**[Integrated On-Silicon and On-Glass Antennas for Mm-Wave Applications](#)**

[Nguyen Ngoc Mai-Khanh](#) and [Kunihiro Asada](#)

**[Power Control in Energy-Efficient Secure Transmission Under QoS and Transmitter's Imperfect CSI](#)** 

[Son Nguyen Trung Le](#), [Vo Nguyen Quoc Bao](#), [Lap Luat Nguyen](#), [Vo Trung Dung Huynh](#) and [Hien Ta](#)

Friday, November 27 1:30 - 3:10

CI10: Computational Intelligence

Room: Hall I

**[Supersonic SNARKs and Applications](#)**  

[Duy Hoang Anh Do](#), [Huy Van Quang Nguyen](#) and [Hy Dinh Ngo](#)

**[Private Identity-Based Encryption for Key Management](#)**  

[Huy Van Quang Nguyen](#) and [Hy Dinh Ngo](#)

**[Predicting Next Purchase Item on JXM Game by K-Means Clustering and ARIMAX Model](#)**  

[Thien Nguyen](#), [Thanh Ngoc Le](#) and [Bac Le](#)

**[Optimal Deployment of Vehicular Mobile Air Quality Monitoring Systems](#)**  

[Anh Le](#), [Hai Chu](#), [Phu Truong Nguyen](#), [Thanh-Hung Nguyen](#) and [Phi Le Nguyen](#)

**[A Web-Based Tool for Semi-Interactively Karyotyping the Chromosome Images for Analyzing Chromosome Abnormalities](#)** 



[Hong Thinh Nguyen](#), [Nguyen Huu Hoang Son](#), [Phạm Thị Việt Hương](#), [Nguyen Thi Cuc Nhung](#), [Do Thi Ram](#), [Nguyen Thanh Binh Minh](#) and [Luu Manh Ha](#)

FIT: Doctoral Symposium

Room: I.41