

KSE 2019 AGENDA

Times	Activity/Session	Location
October 21-23, 2019	SCIENCE AND TECHNOLOGY AUTUMN CAMP ARTIFICIAL INTELLIGENCE: FUNDAMENTAL & APPLICATION	University of Science and Education – The University of Danang http://stcamp2019.ued.udn.vn/welcome
October 24-25, 2019	KSE 2019	Building A6, University of Science and Education – The University of Danang http://kse2019.ued.udn.vn/
October 26, 2019	Cultural tour	

L: Long paper (25 minutes)

S: Short paper (20 minutes)

Keynote Speech: 45 minutes

Coffee Break: 15 minutes

(Updated Wednesday, 9:00 am 23rd October 2019)

DAY 1 (OCTOBER 24, 2019)

The University of Da Nang - University of Science and Education (UD-USE)
Building A6, 459 Ton Duc Thang street, Lien Chieu Dist., Da Nang City

MORNING SESSION

08:00-
08:30

REGISTRATION

08:30-
09:30

OPENING CEREMONY

Venue: Room 202

- Delegate Introduction
- Opening remarks by Rector of University of Science and Education (UD-USE)
- Speech of KSE 2019 General Chair
- Speech of KSE 2019 Program Committee Chair

09:30-
09:40

GROUP PHOTO

09:40-
10:25

Session 1: KEYNOTE I

Venue: Room 202

Chair: Prof. Nguyen Thanh Thuy

Invited speaker: Prof. John Garibaldi

University of Nottingham, UK

10:25-
10:40

COFFEE BREAK

10:40-11:25	Session 2: KEYNOTE II Venue: Room 202 Chair: Prof. Vo Trung Hung Invited speaker: Prof. Emeritus, Akira Namatame National Defense Academy of Japan			
11:30-13:00	LUNCH TIME			
AFTERNOON SESSION				
13:00-15:00	Session 3A: Knowledge Engineering and IoT Venue: Room 202 Chairs: - Prof. Akira Namatame - Prof. Malka N. Halgamue	Session 3B: Deep Learning and Applications for Intelligent Systems Venue: Room 302 Chairs: - Prof. Mizuhito Ogawa - Prof. Nguyen Le Minh	Session 3C: Intelligent Software and Knowledge Representation Venue: Room 402 Chairs: - Dr. Tran Duc Vu - Dr. Teeradaj Racharak	Session 3D: Asian Natural Language Processing Venue: Room 403 Chairs: - Prof. Phan Xuan Hieu - Dr. Minh-Tien Nguyen
13:00 – 13:25	Cao Truong Tran, Lam Thu Bui, Hung Xuan Nguyen <i>A Pareto Corner Search Evolutionary Algorithm and Principal Component Analysis for Objective Dimensionality Reduction (L)</i>	Hung The Nguyen, Tung Nguyen, Do Van Nguyen, Le Thanh Ha <i>A Hierarchical Deep Deterministic Policy Gradients for Swarm Navigation (L)</i>	Thang Huynh Quyet, Duc-Man Nguyen, Nhu-Hang Ha, Trung-Kien Pham, Phuong - Thao Nguyen, Van - Dao Tran <i>A Combinatorial Technique for Mobile Applications Software Testing (L)</i>	Teeradaj Racharak <i>Abstract Argumentation for Summarizing Product Reviews: A Case Study in Shopee Thailand (L)</i>

13:25 – 13:50	Ha Pham Van <i>Evaluation of Maximum Likelihood Estimation and Regression Methods for Fusion of Multiple Satellite Aerosol Optical Depth Data over Vietnam (L)</i>	Vu Tran, Minh Le Nguyen, Kiyooki Shirai, Ken Satoh <i>An Approach of Rhetorical Status Recognition for Judgments in Court Documents Using Deep Learning Models (L)</i>	Nguyen Hoang Hai, Dang N. H. Thanh, Hien Nguyen, Chinthaka Premachandra Shibaura <i>A Fast Denoising Algorithm for X-Ray Images with Variance Stabilizing Transform (L)</i>	Phuong Minh Nguyen, Khoat Than, Minh Le Nguyen <i>Marking Mechanism Sequence-to-sequence Model for Mapping Language to Logical Form (L)</i>
13:50 – 14:15	Thomas W Sherk, Minh-Triet Tran, Tam Nguyen <i>SharkTank Deal Prediction: Dataset and Computational Model (L)</i>	Nguyen Trong Khanh, Bui Ha, Cuong Pham <i>Recognizing Hand Gestures for Controlling Home Appliances with Mobile Sensors (L)</i>	Hung Duy Tran, Hanh LE, Nguyen Thanh Binh <i>Combining Feature Selection, Feature Learning and Ensemble Learning for Software Fault Prediction (L)</i>	Saurav Pradhan, Malka N. Halgamuge, Nguyen Tran Quoc Vinh <i>Effective Preprocessing Technique for Sentiment Analysis in Social Media Data (L)</i>
14:15 – 14:40	Thanh-An Nguyen, Atsuo Yoshitaka <i>Less Visually Different Objects Recognition with Aggregated Residual Siamese Network (L)</i>	Huy Ngoc Pham, Trung Hoang Le <i>Attention-based Multi-Input Deep Learning Architecture for Biological Activity Prediction: An Application in EGFR Inhibitors (L)</i>	Phan Viet Anh, Nguyen Khanh <i>Transfer Learning for Predicting Software Faults (L)</i>	Dang Pham, Quan Thanh Tho, Huy Le <i>Transfer Learning for a Vietnamese Dialogue System (S)</i>
14:40 – 15:00	Hoa Nguyen Thi Quynh, Dang Trung, Azeddine Beghdadi, Heyfa Ammar, Amel Benazza <i>Automatic Blotch Removal Using a Perceptual Approach (S)</i>	Nhung Hong Bui <i>A Compact Trace Representation Using Deep Neural Networks for Process Mining (S)</i>	Thi Minh Phuong Ha, Duy Hung Tran, Hanh LE, Nguyen Thanh Binh <i>Experimental Study on Software Fault Prediction Using Machine Learning Model (S)</i>	Laifu Chen, Minh Le Nguyen <i>Sentence Selective Neural Extractive Summarization with Reinforcement Learning (S)</i>

15:00 – 15:15	COFFEE BREAK			
15:15 – 16:00	Session 4: KEYNOTE III Venue: Room 202 Chair: Prof. Dinh Dung Invited speaker: Prof. Ong Yew Soon Nanyang Technological University, Singapore			
16:05 – 18:05	Session 5A: Operational Research Venue: Room 202 Chairs: - Dr. Hien D. Nguyen - Dr. Ha Minh Hoang	Session 5B: System Engineering Venue: Room 302 Chairs: - Prof. Nguyen Thanh Binh - Prof. Ong Yew Soon	Session 5C: Soft Computing and Knowledge Engineering Venue: Room 402 Chairs: - Prof. Bui Cong Cuong - Prof. Le Hoang Son	Session 5D: Cyber Security Threats and Countermeasures (CSTC) Venue: Room 403 Chairs: - Prof. Nguyen Tan Khoi - Prof. Chandana Withana
16:05 – 16:30	Duy Tran Ngoc Bao, Tran Vu Pham <i>Collaborative Vehicle Routing for Auction-based Pickup and Delivery Dispatch Services (L)</i>	Raphaëlle Bour, Chantal Soulé-Dupuy, Nathalie Vallès-Parlangeau <i>DEMOS: a DEsign Method for demOcratic Information System (L)</i>	Nhung Cao, Martin Štěpnička <i>Fuzzy Relational Equations Employing Dragonfly Operations (L)</i>	Van Kha Nguyen <i>A Novel Approach for Data Collection and Network Attack Warning (L)</i>
16:30 – 16:55	Dung Pham, Hieu Duong, Bao Quy Bui, Canh Van Pham, Viet Anh Nguyen <i>Multiple Topics Misinformation Blocking in Online Social Networks (L)</i>	Hiep Xuan Huynh, Kien Trung Do, Khoa Duc Nguyen, Phuong Truc Thi Pham, Tram Huynh Vo, Thai Minh Truong <i>Dissolved Oxygen Simulation of Catfish Pond with Cellular Automata (L)</i>	Dinh-Sinh Mai, Thanh Long Ngo <i>General Semi-supervised Possibilistic Fuzzy c-Means Clustering for Land-cover Classification (L)</i>	Sonexay Say Luangoudome <i>End to End Message Encryption Using Poly1305 and XSalsa20 in Low Power and Lossy Networks (L)</i>

16:55 – 17:20	Trung Thanh Nguyen, Duy Manh Vu, Minh Hoàng Hà <i>On the Capacitated Scheduling Problem with Conflict Jobs (L)</i>	Hien Nguyen, Vuong Pham, Dung Tran, Trung Le <i>Intelligent Tutoring Chatbot for Solving Mathematical Problems in High-school (L)</i>	Harshvadan Talpada, Malka N. Halgamuge, Nguyen Tran Quoc Vinh <i>An Analysis on Use of Deep Learning and Lexical- Semantic Based Sentiment Analysis Method on Twitter Data to Understand the Demographic Trend of Telemedicine (L)</i>	M. Hirani, M. N. Halgamuge, Pham Duong Thu Hang <i>Study of Data Security Models Developed by Blockchain Technology for Enhancing Privacy and Security Techniques in Different Industrial Domains (L)</i>
17:20 – 17:45	Dam Thanh, Duy Thinh Nguyen, Trung Kien Do, Quoc Trung Bui <i>On the Traveling Salesman Problem with Hierarchical Objective Function (L)</i>	Nguyen Hanh, Hanh Dang, Nguyen Trung <i>On Analyzing Rule Dependencies to Generate Test Cases for Model Transformations (L)</i>	Zhibo Zhu, Qinke Peng, Xinyu Guan <i>Personalized PageRank Based Feature Selection for High-dimension Data (L)</i>	Bao Ngoc Vi, Nguyen Huu Noi, Ngoc Tran, Cao Truong Tran <i>Adversarial Examples Against Image-based Malware Classification Systems (S)</i>
17:45 – 18:05	Pham Tuan Anh, Ho Doan Quoc, Chau Tuan Cuong, Phan Nguyen Ky Phuc <i>A Two-Stage Approach of Vehicle Routing Problem. A Case Study of Fresh Food Distribution Center (S)</i>	Tran Van Dai <i>A Novel Recovery Data Technique on MLC NAND Flash Memory (S)</i>	Bui Cuong, PV Chien, T. Huyen, PV Hai <i>Some Fuzzy Inference Processes in Picture Fuzzy Systems (S)</i>	Hoang Dinh Linh, Tran Hong Thai <i>Alpha-DBL: A Reasonable High Secure Double-Block- Length Hash Function (S)</i>
18:30- 21:30	BANQUET			

END OF DAY 1

DAY 2 (OCTOBER 25, 2019)

The University of Da Nang - University of Science and Education (UD-USE)
Building A6, 459 Ton Duc Thang street, Lien Chieu Dist., Da Nang City

MORNING SESSION

08:00-
08:30

REGISTRATION

08:30-
09:15

Session 6: KEYNOTE IV
Venue: Room 202
Chair: Prof. Phan Xuan Hieu
Invited speaker: Prof. Thanaruk Theeramunkong
Thammasat University, Thailand

09:15-
10:00

Session 7: KEYNOTE V
Venue: Room 202
Chair: Prof. Nguyen Le Minh
Invited speaker: Prof. Sung Wook Baik
Sejong University, Korea

10:00-
10:15

COFFEE BREAK

10:15 – 11:35	Session 8A: Cyber Security Venue: Room 202 Chairs: - Prof. Huynh Xuan Hiep - Dr. Nguyen Thi Ngoc Anh	Session 8B: Asian Natural Language Processing Venue: Room 302 Chairs: - Prof. Sung Wook Baik - Dr. Phan Viet Anh	Session 8C: Intelligent Systems Venue: Room 402 Chairs: - Prof. Thanaruk Theeramunkong - Prof. Huynh Thi Thanh Binh	Session 8D: Advanced Bioinformatics and Knowledge Systems Venue: Room 403 Chairs: - Prof. Le Sy Vinh - Dr. Vu Thi Tra
10:15 – 10:35	Phai Vu Dinh, Dung Phan, Ngoc Tran, Nathan Shone, Qi Shi <i>Behaviour-aware Malware Classification: Dynamic Feature Selection (S)</i>	Uyen Phan Thi Phuong, Tung Ngoc Thanh Huynh, Thinh Truong, An Dao, Dinh Dien <i>Vietnamese Span-based Constituency Parsing with BERT Embedding (L)</i>	Ngoc-My Nguyen, Thanh Hai Nguyen <i>Human Gait Patterns Classification Based on MEMS Data Using Unsupervised and Supervised Learning Algorithms (S)</i>	Vania Cecchini, Thanh-Puong Nguyen, Thomas Pfau, Sébastien De Landtsheer, Thomas Sauter <i>An Efficient Machine Learning Method to Solve Imbalanced Data in Metabolic Disease Prediction (S)</i>
10:35 – 10:55	Hung Nguyen, Pham Ngoc Dung, Ngoc Tran, Qi Shi <i>Malware Detection Based on Directed Multi-Edge Dataflow Graph Representation and Convolutional Neural Network (S)</i>	Sorratat Sirirattanakarin <i>Enhancing Metagenome-based Disease Prediction by Unsupervised Binning Approaches (S)</i>	Nguyen Nhat Anh, Son Luong <i>Prediction Car Prices Using Quantify Qualitative Data and Knowledge-Based System (S)</i>	Thanh Hai Nguyen <i>Enhancing Metagenome-based Disease Prediction by Unsupervised Binning Approaches (S)</i>
10:55 – 11:15	Thanh Cong Bui, Van Loi Cao, Minh Hoang, Uy Nguyen <i>A Clustering Based Shrink AutoEncoder for Detecting Anomalies in Intrusion Detection Systems (S)</i>	Nguyen Thi Thu Hien, Binh Nguyen Thai, Hung Nguyen, Truong Do, Mai Luong, Nguyen Thi Minh Huyen <i>Recovering Capitalization for Automatic Speech Recognition of Vietnamese Using Transformer and Chunk Merging (S)</i>	Quach Hai Tho, Anh Phuong Pham, Cong Phap Huynh <i>A Solution for Building Motion Tracking System with Model Predictive Control for Autonomous Vehicles (S)</i>	Bang Tran, Duc Tran, Hung Nguyen, Nam Vo, Tin Nguyen <i>RIA: A Novel Regression-based Imputation Approach for Single-Cell RNA Sequencing (L)</i>

11:15 – 11:35	Quach Hai Tho, Anh Phuong Pham, Cong Phap Huynh A Solution to Ethical and Legal Problem with the Decision-Making Model of Autonomous Vehicles (S)	Hao Minh Nguyen, Dang Van Thin, Ngan L.T. Nguyen, Tri Truong A Corpus for Aspect-Based Sentiment Analysis in Vietnamese (S)	Minh-Tien Nguyen, Vu Tran The Repository of Web Document Summarization Using Social Information (S)	M. Rupasinghe, M. N. Halgamuge, Nguyen Tran Quoc Vinh Forecasting Trading-Time Based Profit-Making Strategies in Forex Industry: Using Australian Forex Data (S)
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11:35-13:00	LUNCH TIME			
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AFTERNOON SESSION				
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13:00-14:40	Session 10A: Intelligent Software and Knowledge Representation Venue: Room 202 Chairs: - Dr. Thanh Ha Hoang Thi - Dr. Nguyen Thi Ngoc Anh	Session 10B: Deep Learning and Intelligent Systems Venue: Room 302 Chairs: - Dr. Phan Viet Anh - Dr. Nguyen Quang Vu	Session 10C: Advanced Analysis Models for Complex Systems (*) Venue: Room 402 Chairs: - Prof. Nguyen Tran Quoc Vinh - Prof. Phan Xuan Hieu - Dr. Tran Duc Vu	Session 10D: Knowledge Understanding by AI Models Venue: Room 403 Chairs: - Prof. Huynh Xuan Hiep - Dr. Vu Thi Tra
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13:00 – 13:25	Vinh Nguyen, Khoa Phu Nguyen, Vu Nguyen Clustering Automation Test Faults (L)	Tai-Long Nguyen, Do Van Nguyen, Le Thanh Ha Reinforcement Learning Based Navigation with Semantic Knowledge of Indoor Environments (L)	Kamini Simi Bajaj, Anna Katrina Gomez Challenges of Testing Complex Internet of Things (IoT) Devices and Systems (L)	Van Truong Vu, Bui Thu Lam, Trung Nguyen A Multi-Objective Cooperative Coevolutionary Approach for Remote Sensing Image Classification (S)
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13:25 – 13:50	Tuan Thanh Nguyen, Nhan Thanh Le, Hoang Thi-Thanh-Ha <i>Toward a Model for Verification of Business Logic Layer in 3-Layer Architecture: CPN-ECA Model (L)</i>	Ashok Dhakal, P. W.C. Prasad, Abeer Alsadoon, Angelika Maag, Amr Elchouemi, Nguyen Tran Quoc Vinh <i>Wearable Devices for Monitoring Dementia Sufferers: A Review and Framework for Discussion (L)</i>	Sabih ur Rehman, Jonathan Barker <i>Investigating the Use of Machine Learning for SMART Parking Application (L)</i>	Duy Khanh Ninh <i>A Speaker-Adaptive HMM- based Vietnamese Text-to- Speech System (S)</i>
13:50 – 14:15	Linh Nguyen, Phuong Le, Tinh Nguyen, Khoi Vo, Suong Hoang <i>Toward a Smart Platform for Data Science Career (L)</i>	Xuan Tho Dang, Duong Hung Bui, Thi Hong Nguyen, Nguyen Tran Quoc Vinh, Dang Hung Tran <i>Prediction of Autism- Related Genes Using a New Clustering-Based Under- Sampling Method (L)</i>	Nectarios Costadopoulos, Md Zahidul Islam, Dapeng Tien <i>Using Z-score to Extract Human Readable Logic Rules from Physiological Data (L)</i>	Santipong Thaiprayoon, Kanokorn Trakultaweekoon, Pornpimon Palingoon <i>Design and Development of a Plagiarism Corpus in Thai for Plagiarism Detection (S)</i>
14:15 – 14:40	Thang Huynh Quyet, Thanh-Trung Vu, Doan- Cuong Nguyen, Thi- Huong-Giang Vu, Thi- Xuan-Hoa Nguyen, Thanh Chung Dao <i>Some Improvements of Using the NSGA-II Algorithm for the Problem of Resource Allocation and Scheduling and Its Applying to Inventory Management Strategies (L)</i>	Hung Minh Le, Manh Mai, Lang Van Tran <i>Deep Feature Fusion for Breast Cancer Diagnosis on Histopathology Images (L)</i>	Anjana Wijesinghe, Pradeepa Samarasinghe, Sudarshi Seneviratne, Pratheepan Yogarajah, Koliya Pulasinghe <i>Machine Learning Based Automated Speech Dialog Analysis of Autistic Children (L)</i>	Thi-Hai-Yen Vuong <i>Learning to Transform Vietnamese Natural Language Queries into SQL Commands (S)</i>

14:40 – 15:05	COFFEE BREAK	P. W.C. Prasad, Abeer Alsadoon, Angelika Maag, Amr Elchouemi, Kiran Shreshta, Pham Duong Thu Hang <i>Health Monitoring Based on Wireless Sensor Networks: A Comprehensive Framework (L)</i>	Pham Thanh Hiep, Hoang Tran Manh, Hoang Vinh, Vu Son <i>Performance Analysis of NOMA Beamforming Multiple Users Relay Systems (S)</i>
15:05 – 15:30		Sandeep Dhakal, P. W.C. Prasad, Abeer Alsadoon, Angelika Maag, Amr Elchouemi, Nguyen Tran Quoc Vinh <i>Systems Analysis of Acoustic Underwater Sensor Networks: A Taxonomy (L)</i>	
15:30 – 15:55		J. Mothe, Lea Laporte, Adrian-Gabriel Chifu <i>Predicting Query Difficulty in IR: Impact of Difficulty Definition (L)</i>	
15:55 – 16:20		Amal Ait Brahim, Rabah Tighilt Ferhat, Gilles Zurfluh <i>Extraction Process of Conceptual Model from a Document-Oriented NoSQL Database (S)</i>	

16:20-
17:05

Session 9: KEYNOTE VI
Venue: Room 202
Chair: Prof. Mizuhito Ogawa
Invited speaker: Prof. Ryuhei Uehara
Japan Advanced Institute of Science and Technology (JAIST), Japan

17:05
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18:00

CONFERENCE CLOSING

Venue: Room 202

- Conference summary
- Best paper award
- KSE 2020 speech

END OF DAY 2

DAY 3 (OCTOBER 26, 2019)

MEETING BETWEEN FOREIGN & VIETNAMESE RESEARCHERS