

SoICT 2019 PROGRAM

4 December 2019
Hanoi University of Science and Technology, Hanoi, Vietnam

8:30	Registration Lecture Hall, 3 rd floor, B1 Building, Hanoi University of Science and Technology		Techshow B1 Building
9:00-9:15	Opening Lecture Hall, 3 rd floor, B1 Building, Hanoi University of Science and Technology		
9:15-9:45	Keynote 1 <i>Hanan Samet, The University of Maryland, College Park, USA</i> Reading News with Maps by Exploiting Spatial Synonyms Chair: Zhenjiang Hu		
9:45-10:15	Keynote 2 <i>Kim In Soo, President of Samsung Vietnam Mobile R&D Center</i> Samsung's Achievements in AI and Introduction of Trendy Technologies Chair: Michel Toulouse		
10:15-10:20	Photo session		
10:20-10:30	COFFEE BREAK		
10:30-11:00	Keynote 3 <i>Wanlei Zhou, University of Technology Sydney, Australia</i> Enhancing privacy-preserving through differential privacy Chair: Abdelhamid Mellouk		
11:00-11:30	Keynote 4 <i>Le Nhan Tam, Chief Technology Officer, IBM Vietnam</i> A model engineering approach for cloud service migration in multi-cloud management Chair: Toshihiko Yamasaki		
11:30-13:30	Lunch - 5 th floor		
13:30-15:30	<p>Session 4: Talk show Lecture Hall, 3rd floor, B1 Building, Hanoi University of Science and Technology</p> <ul style="list-style-type: none"> - Nguyen Minh Khoi - CTO, Sapo Technology JSC Building a multi-channel sales and management system - Tran Van Dung, Deputy Director of FPT Software Hanoi, and Tran Thanh Cong, Director of FHN.DCS New Technology Research Center, FPT Corporation akaDoc - A total solution for digitizing text documents - Sergei Bochenkov - Director of Search, Tiki Efficient Spellchecker - Luu Duc Ly, Head of Electronic Government solutions, Tri Nam JSC The role of Microservices architecture in digital transformation - Nguyen Hai Nam - CEO, Magenest Ecommerce smart business management based on data - Nguyen Thanh Cong - CEO, DAC Data Science Vietnam AdTech and BigData / AI related issues - Do Thi Hai Yen, Data Scientist, Viettel group Research and develop AI applications in Viettel Group - Alex Nguyen, CTO & Founder, Magestore The Rise of Web Technology Discover new strides with PWA, PWA Headless & Web Assembly - Ta Minh Ngoc, Director of Medium and Large Product Development Center, MISA AMIS.VN Software, the most popular enterprise management solution - Pham Tuan, Software Architect, Linagora Smart Open Source for Digital Workplace - Nguyen Dinh Quang - Solution Manager, DASAN VN The importance of network infrastructure in digital transformation - Pham Huu Quang, AI Engineer and Researcher, Sun* Inc. AI in industry: Application of EEG analysis in the production of smart headphones 	<p>Session 5: ICT Solution for E-Governance Room 205, 2nd floor, B1 Building, Hanoi University of Science and Technology Chair: Dao Ngoc Chien</p> <ul style="list-style-type: none"> - Xuan Dau Hoang and Ngoc Tuong Nguyen A Multi-layer Model for Website Defacement Detection - Ngo Xuan Bach, Nguyen Thi Thanh Thuy, Dang Bao Chien, Trieu Khuong Duy, To Minh Hien and Tu Minh Phuong Reference Extraction from Vietnamese Legal Documents - Giao Ho Kim, Manh Tran Cong and Minh Nguyen Hieu A Study on Batch Verification Scheme in Outsourced Encrypted Database - Hoa Nguyen Ngoc, Ha Le Viet, On Phung Van and Hanh Du Phuong Toward a Deep Learning Approach for Detecting PHP Webshell - Viet Cuong Trinh One-Verifier Signature Scheme and Its Applications - Binh Nguyen Thanh and Pham Doan Tinh Some solutions for existing problems of the architectural framework for Vietnamese e-government 	
16:00	Transfer to Ha Long Bay		
18:30	Transfer to Ha Long Bay		

5 December 2019
Wyndhm hotel, Ha Long Bay

8:30	Registration Panorama, 3 rd floor		
9:00-9:05	Opening Panorama, 3 rd floor		
9:05-9:50	Keynote 5 <i>Abdelhamid Mellouk, Department of Networks & Telecommunications (N&T)</i> Adaptive Control for multi flow traffic based on quality of experience and quality of service paradigms Chair: Hanan Samet		
9:50-10:00	COFFEE BREAK		
10:00-12:00	<p>Session 7A - Panorama 1, 3rd floor AI and Big Data Analytics I Chair: Albert Cabellos</p>	<p>Session 7B - Panorama 2, 3rd floor Network Communication and Security I Chair: Michel Toulouse</p>	<p>Session 7C - Ruby, 3rd floor Software Engineering and New Computing Trends I Chair: Ho Tu Bao</p>
10:00-10:20	<i>Nguyen Tien Ha, Ngo The Quyen, Nguyen Thi Minh Huyen and Ha My Linh</i> Rule based English-Vietnamese bilingual terminology extraction from Vietnamese documents	<i>Thu Pham, Nga Nguyen and The Ngoc Dang</i> Quantum Key Distribution over Hybrid Fiber-Wireless System for Mobile Networks	<i>Duc Minh Le, Duc-Hanh Dang and Ho Thanh Vu</i> DomainApp: A Module-Based Domain-Driven Software Framework
10:20-10:40	<i>Thu Nguyen-Thanh and Giang-Tc Chan</i> Vietnamese sentiment analysis for hotel review based on overfitting training and ensemble learning	<i>Jaeyeon Park, Dongil Shin, Jaeyoung Lee, Hyungseok Lee and Dongkyoo Shin</i> Design and Implementation of Web Browser Secure Storage for Web Standard Authentication Based on FIDO	<i>Viet Tran, Trung Nguyen and Pham Ngoc Hung</i> On Implementation of the Improved Assume-Guarantee Verification Method for Timed Systems
10:40-11:00	<i>Hai Cao Manh, Huong Le Thanh and Tuan Luu Minh</i> Extractive Multi-document Summarization using K-means, Centroid-based Method, MMR, and Sentence Position	<i>Tran Nghi Phu, Nguyen Ngoc Binh, Nguyen Dai Tho, Nguyen Ngoc Toan and Le Huy Hoang</i> CS00-CFGVex: A Novel Feature Extraction Method for Detecting Cross-Architecture IoT Malware	<i>Kazuhiro Kikuma, Takeshi Yamada, Koki Sato and Kiyoshi Ueda</i> Preparation method in automated test case generation using machine learning
11:00-11:20	<i>Phien Nguyen Ngoc, Nhan Nguyen Trong and Anh Duong Tuan</i> An Efficient Method for Discovering Variable-length Motifs in Time Series based on Suffix Array	<i>Ying Zhao, Junjun Chen, Di Wu, Jian Teng and Shui Yu</i> Multi-Task Network Anomaly Detection using Federated Learning	<i>Jihoon Yoo, Dongil Shin and Dongkyoo Shin</i> Prediction System for Fine Particulate Matter Concentration Index by Meteorological and Air Pollution Material Factors Based on Machine Learning
11:20-11:40	<i>Minh-Tien Nguyen, Tran Viet Cuong and Nguyen Xuan Hoai</i> Exploiting User Comments for Document Summarization with Matrix Factorization	<i>Trung Pham Duy, Hai Nguyen Nhat and Ho Nguyen Thi Hong</i> Secure EEG-Based User Authentication System Integrated with Robust Watermarking	<i>Nhat-Hoa Tran</i> A Specification-Based Approach to Model Checking Event-Driven Systems
11:40-12:00	<i>Tatiana Kuvshinova and Anton Khritankov</i> Improving a Language Model Evaluator for Sentence Compression Without Reinforcement Learning		
12:00-13:30	Lunch - Blue Bay Restaurant, 1 st floor		
13:30-14:15	Keynote 6 <i>Toshihiko Yamasaki, The University of Tokyo, Japan</i> Attractiveness Computing-Analysis and Enhancement of Attractiveness using Big Multimedia Data Chair: Ide Ichiro		
14:15-14:30	COFFEE BREAK		
14:30-16:30	<p>Session 9A - Panorama 1, 3rd floor AI and Big Data Analytics II Chair: Masatoshi Yoshikawa</p>	<p>Session 9B - Panorama 2, 3rd floor Network Communication and Security II Chair: Albert Cabellos</p>	<p>Session 9C - Ruby, 3rd floor Software Engineering and New Computing Trends II Chair: Marc Bui</p>
14:30-14:50	<i>Thi Kim Thao Ho, Quang Vu Bui and Marc Bui</i> Co-author Relationship Prediction in Bibliographic Network: A New Approach Using Geographic Factor and Latent Topic Information	<i>Quang Minh Bui and Michel Toulouse</i> Minimum Graph Partition with Basis	<i>Tuan-Dat Trinh, Thi-Huong-Giang Vu and Van-Minh Le</i> Browser Extension-based Crowdsourcing Model for Website Monitoring
14:50-15:10	<i>Hong-Ngoc Bui and Viet-Trung Tran</i> A Novel Conditional Random Fields Aided Fuzzy Matching in Vietnamese Address Standardization	<i>Van-Vinh Nguyen, Tuyen Tran Trong, Viet-Tri Va, Vanvan Huynh, Hoang-Sy Nguyen and Miroslav Voznak</i> Power-Splitting Protocol Non-Orthogonal Multiple Access (NOMA) in 5G Systems: Outage Performance	<i>Le Gia Cuong, Phan Duy Hung and Nguyen Luu Bach</i> Risk Management for Agile Projects in Offshore Vietnam

15:10-15:30	Son Nguyen Van and Dung Pham Quang A New Variant of Truck Scheduling for Transporting Container Problem	Thi Thu Hien Do, Thanh Ngo Duc, Duy-Dinh Le, Hiroo Sekiya, Vau-Hau Pham and Kien Nguyen A Software Defined Networking Approach for Guaranteeing Delay in Wi-Fi Networks	Xuan-Tung Nguyen, Quyet-Thang Huynh, Phuong-Nam Cao, Van-Quyet Nguyen and Kyungbaek Kim A Genetic Algorithm for Large Graph Partitioning Problem
15:30-15:50	Trang Tran Ba, Thanh Le Tien, Hieu Ly Trung and Thanh Pham Dinh, Binh Huynh Thi Thanh Multifactorial Evolutionary Algorithm For Clustered Minimum Routing Cost Problem	Hai-Chau Le, Hai Dao Thanh and Dang The Ngoc Development of Dynamic QoT-aware Lightpath Provisioning Mechanism with Flexible Advanced Reservation for Distributedly-controlled Multi-domain Elastic Optical Networks	Dang Trung Anh and Nguyen Thi Thu Trang Abstractive Text Summarization Using Pointer-Generator Networks With Pre-trained Word Embedding
15:50-16:10	Nguyen Xuan Hung, Bui Thu Lam and Tran Cao Trung Clustering Method using Pareto Corner Search Evolutionary Algorithm for Objective Reduction in Many-Objective Optimization Problems	Phi Le Nguyen, Kien Nguyen and Thanh Hung Nguyen A Dynamic Routing Protocol for Maximizing Network Lifetime in WSNs with Holes	Bui Thi Mai Anh, Nguyen Tra My and Nguyen Thi Thu Trang Enhanced Genetic Algorithm for Single Document Extractive Summarization
16:10-16:30	Seungjin Lee, Dongil Shin and Dongkyoo Shin Sensor-based Abnormal Behavior Detection Using Autoencoder	Tran Tuan Chu, Van Tong, Hai Anh Tran, Sami Souihi, Tran Quang Duc and Abdelhamid Mellouk NextLab: A new hybrid testbed platform for Software-defined Networking	

6 December 2019
Wyndham hotel, Ha Long Bay

8:30	Registration Panorama, 3rd floor		
9:00-9:45	Keynote 7 Profesor Masatoshi Yoshikawa, Kyoto University, Japan Personal data as new oil Chair: Zhenjiang Hu		
9:45-9:55	COFFEE BREAK		
9:55-12:00	Session 11A - Panorama 1, 3rd floor AI and Big Data Analytics III Chair: Ide Ichiro	Session 11B - Panorama 2, 3rd floor Security and New Computing Trends Chair: Michel Toulouse	Session 11C - Ruby, 3rd floor Perception and Machine Interaction I Chair: Nguyen Thi Thy
9:55-10:15	Takuya Asakura, Shunsuke Akama, Eri Shimogawara, Toru Yamaguchi and Shoji Yamamoto Emotional Speech Generator by using Generative Adversarial Networks	Trang-Minh Hoang, Van-Truong Nguyen, Tien-Xuyen Nguyen and Nhu-Lan Vu A new Anomaly Traffic Detection Based on Fuzzy Logic Approach in Wireless Sensor Networks	Marco Tumaini, Jiannong Cao and Milos Stajmenovic Unsupervised pregnancy and physical activity detection in mammals using circadian rhythms
10:15-10:35	Phillip Shin, Jack Sampson and Vijaykrishnan Narayanan Context-Aware Collaborative Object Recognition For Distributed Multi Camera Time Series Data	Chi-Hieu Nguyen and Khanh-Van Nguyen Balanced landmark-based graph partitioning with application in navigating with limited resource	Tatsuya Mimura and Yohei Nakada Quantification of Pass Plays Based on Geometric Features of Formations in Team Sports
10:35-10:55	Dung Nguyen Quoc, Anh Le Duc and Ivan Zelinka OCR Error Correction for Unconstrained Vietnamese Handwritten Text	Chia-Hung Liao, Yao-Wen Teng and Shyan-Ming Yuan Blockchain-Based Cross-Organizational Integrated Platform for Issuing and Redeeming Reward Points	Toan Tran Viet, Nishikawa Rin, Thanh Le Tien, Takemoto Masashi, Hoi Tran Van, Binh Huynh Thi Thanh and Nakajo Hisanori Cow estrus detection with low-frequency accelerometer sensor by unsupervised learning
10:55-11:15	Sang Dinh and Lan Phan Ngoc BK.Synapse: A scalable distributed training framework for deep learning	Toshifusa Sekizawa, Qian Chen and Taiju Mikoshi Recursive Gateway Allocation Combined with Self-localization and Model Checking in Mobile Ad-hoc Networks	Sang Dinh and Cuong Le Tran Bao Improving CRNN with EfficientNet-like feature extractor and multi-head attention for text recognition
11:15-11:35	Xuan Tuan Le Building Face Recognition System with Triplet-based Stacked Variational Denoising Autoencoder	Viet-An Pham, Dinh-Hieu Hoang, Huy-Hoang Chung-Nguyen, Mai-Khiem Tran and Minh-Triet Tran Privacy Preserving Visual Log Service with Temporal Interval Query using Interval Tree-based Searchable Symmetric Encryption	Sang Dinh and Hung Duong Viet YOLOv3-VD: A sparse network for vehicle detection using variational dropout
11:35-11:55		Dung Truong, Duc Tran, Lam Nguyen, Hieu Mac, Hai Anh Tran and Tung Bui Detecting Web Attacks using Stacked Denoising Autoencoder and Ensemble Learning Methods	Minh-Tri Ho, Trong-Tung Nguyen, Hieu Dao and Minh-Triet Tran Visual Assistant for Crowdsourced Anomaly Event Recognition in Smart City
12:00-13:30	Lunch - Blue Bay Restaurant, 1st floor		
13:30-14:15	Keynote 8 Albert Cabellos, Department of Computer Architecture Universitat Politècnica de Catalunya, Spain Unveiling the potential of Graph Neural Networks Chair: Marc Bui		
14:15-14:30	COFFEE BREAK		
14:30-16:30	Session 13A - Panorama 1, 3rd floor AI and Big Data Analytics IV Chair: Nguyen Xuan Hoai	Session 13B - Panorama 2, 3rd floor AI and Big Data Analytics V Chair: Marc Bui	Session 13C - Ruby, 3rd floor Perception and Machine Interaction II Chair: Tran Minh Triet
14:30-14:50	Luan Tran, Lijue Fan and Cyrus Shahabi Fast Distance-based Outlier Detection in Data Streams	- Nicholas Ho, Pooi-Mun Wong, Ren-Jun Soon, Chin-Boon Chng and Chee-Kong Chui Blockchain for Cyber-Physical System in Manufacturing - Ban Ha-Bang and Nguyen Duc-Nghia Using Metaheuristic for Solving the Resource-Constrained Deliveryman Problem - Soufian Ben Amor, Guillaume Guérard and Loup-Noé Levy Systemic Approach for Modeling a Generic Smart Grid - Atsuki Tamoto and Katsumu Ito Voice authentication by text dependent single utterance for in-car environment - Yusuke Sano and Yohei Nakada Improving Prediction of Pass Receivable Players in Basketball - Sorachi Nakazawa, Satoru Ushijima and Yohei Nakada An EM Algorithm based Method for Constructing Dynamic Saliency Maps considering Characteristics while Driving - Asad Khattak and Zabair Asghar Stock Market Trend Prediction using Supervised Learning - Cuong Sai and Maxim Shcherbakov PdM - A predictive maintenance modeling tool implemented as R-package and web-application	Christian Lehning, Lukas Jünger and Klaus Bengler Don't Drive Me My Way - Subjective Perception of Autonomous Braking Trajectories for Pedestrian Crossings
14:50-15:10	Nguyen Hoai Nam Le, Thi Hoang Vy Ho, Hoang My Le, Thi Tuyet Mai Le, Gia Hang Tiet and Le Thi Kim Nhung Ho An approach to improving group recommendation systems based on latent factor matrices		Binh Nguyen, Quang Pham and Cuong Nguyen Punctuation Prediction for Vietnamese Texts Using Conditional Random Field
15:10-15:30	Pham Hoang Anh, Ngo Xuan Bach and Tu Minh Phuong Session-Based Recommendation with Self-Attention		Hung Lu and Oanh Nguyen Spatio-temporal Multi-level Fusion for Human Action Recognition
15:30-15:50	Mai Haong Dinh, Viet Dung Nguyen, Van Long Truong, Phan Thuan Do, Thanh Thao Phan and Duc Nghia Nguyen Simulated Annealing for the Assembly Line Balancing Problem in the Garment Industry	- Thanh Cong Truong, Quoc Bao Diep and Ivan Zelinka Artificial intelligence in the cyber domain: offense and defense - Pham Van Toan, Tran Ngo Quang Ngoc and Ta Minh Thanh Deep learning approach for singer voice classification of Vietnamese popular music - Hai Vu, Xuan Huy Manh, Bach Quan Dao, Van Kien Ha, Viet Hang Dao, Phuc Binh Nguyen, Bao Long Hoang and Thanh Hai Vu Labelling Stomach Anatomical Locations In Upper Gastrointestinal Endoscopic Images Using a Convolution Neuronal Network	Vu Quoc Hung, Le Dinh Duy, Vu Minh Hieu Dang and Nguyen Vinh Tiep Noise Removal Based Query Pre-processing to Improve Face Search Performance in Large Scale Video Databases
15:50-16:10		- Hien Do Hoang, Phan The Duy and Van-Hau Pham A Security-Enhanced Monitoring System for Northbound Interface in SDN using Blockchain - Duy-An Ha, Ting-Hsuan Chen and Shyan-Ming Yuan Unsupervised methods for Software Defect Prediction	
17:30	Transfer to Gala Diner		
18:00-20:00	GALA DINNER Co Ngu Restaurants 66 Halong str., Bai Chay, Halong, Quang Ninh		

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