

CSoNet-2023 PROGRAM

National Economics University, Hanoi, Vietnam, December 11-13, 2023

Conference Day 1 – December 11, 2023 (Monday)	
08:00-16:00	Registration Location: Room G, A1 Building
08:30-08:45	Opening Ceremony Location: Room G, A1 Building
	Welcome speech by the President of National Economics University
	General Chairs remarks (Prof. Xingquan Zhu)
08:45-10:00	Keynote Talk 1: Learning with Graphs Speaker: Professor Roger Wattenhofer Chairs: Tra My Thai and Minh Hoàng Hà Location: Room G, A1 Building
10:00-10:15	<i>Coffee break</i>
10:15-11:55	Session Mon-1A Machine learning and prediction 1 Chairs: Thanh Binh Nguyen and Phi Le Nguyen Location: Room G, A1 Building
10:15-10:35	Alexandr Karpovich and Lyudmila Gadasina, Analytics for an E-commerce: Demand analysis and prediction (8010)
10:35-10:55	Quang-Linh Tran, Binh T. Nguyen, Gareth J. F. Jones and Cathal Gurrin, ViEcomRec: A Novel Dataset for Recommendation Systems in Vietnamese E-commerce For Face Cleanser Products (687)
10:55-11:15	Soohyeon Choi, Rhongho Jang, Daehun Nyang and David Mohaisen, Untargeted Code Authorship Evasion with Seq2Seq Transformation (251)
11:15-11:35	Nguyen Bao Anh Le, Hien Thanh Thi Nguyen and Hai Thanh Nguyen, Fake Face Recognition on Images Generated by Various Deepfakes Tools. (1484)
11:35-11:55	Ling Wang, Fangjie Song, Tie Hua Zhou, Chunxu Yang and Wanlin Zhang, Mining the Potential Temporal Features based on Wearable EEG Signals for Driving State Analysis (2073)
12:00-13:30	<i>Lunch</i>

13:30-16:45	<p>Session Mon-1B</p> <p>Machine learning and prediction 2</p> <p>Chairs: Phi Le Nguyen and Duc-Trong Le</p> <p>Location: Room G, A1 Building</p>
13:30-13:50	Kieu Anh Truong Thi, Truong-Thuy Tran, Cam-Van Thi Nguyen and Duc-Trong Le, Enhancing Visual Question Answering with Generated Image Caption (2755)
13:50-14:10	Minh Tu Le, Bao Thang Ta, Nhat Minh Le, Phi Le Nguyen and Van Hai Do, A Gaussian Distribution Labeling Method for Speech Quality Assessment (2888)
14:10-14:30	Duc Nguyen Sy, Thien Huynh Ngoc, Thang Phung Dinh, Thu Bui Minh, Phuong Thai Tieu, Long Huynh Bao, Ty Nguyen Thi, An Nguyen Thai, Huu Pham Thanh and Tho Quan Thanh, VN-Legal-KG: Vietnam Legal Knowledge Graph for Legal Statute Identification on Land Law Matters (4669)
14:30-14:50	Do Quang Manh, Tran Minh Khoi, Duong Minh Hieu and Phan Duy Hung, TextFocus: Efficient Multi-Scale Detection for Arbitrary Scene Text (4976)
14:50-15:05	<i>Coffee break</i>
15:05-15:25	T. Tin Tran and Tan Loc Nguyen, CombiGCN: An effective GCN model for Recommender System (5209)
15:25-15:45	Tuan Nguyen, Hanh Nguyen, Long Nguyen, Nhung Nguyen and Kien Doan, Unveiling Sentiments in Vietnamese Education Texts: Could Large Language Model beat PhoBERT? (5947)
15:45-16:05	Hai Thanh Nguyen, Phat Minh Nguyen, Quang Duy Tran and Phuong Ha Dang Bui, An Approach Using Threshold-Based Noise Reduction and Fine-tuned ShuffleNetV2 for Plant Leaf Disease Detection (7995)
16:05-16:25	An Dang, My Linh Ha and Duc Quang Vu. Multi-scale Aggregation Network for Speech Emotion Recognition (116)
16:25-16:45	The Nguyen Manh and Hoan Bui Quoc, Portfolio Construction based on Time Series Clustering Method: Evidence in Vietnamese Stock Market (186)
16:45-17:05	Huong Hoang Luong, Lê Thị Thu Lan and Hai Thanh Nguyen, An Approach for Web Content Classification with FastText. (9811)
Conference Day 2 – December 12, 2023 (Tuesday)	
08:30-09:30	<p>Panel discussion: Large Language Models: theory, applications, and challenges</p> <p>Panelists: Tu Bao Ho, David Mohaisen, Tra My Thai, Roger Wattenhofer</p> <p>Moderator: Xingquan Zhu</p> <p>Location: Room G, A1 Building</p>
09:30-09:45	<i>Coffee break</i>

09:45-11:55	Session Tue-1A Optimization 1 Chairs: Trung Thanh Nguyen and Canh Pham Van Location: Room G, A1 Building
09:45-10:05	Raed Alharbi, My T. Thai and Lan N. Nguyen. Continuous Length-Bounded Paths Interdiction (2010)
10:05-10:25	Guangwen Zhou, Bin Liu and Yuanyuan Qiang, Deletion-Robust Submodular Maximization under the Cardinality Constraint over the Integer Lattice (5985)
10:25-10:45	Ba Luat Le, Layla Martin, Emrah Demir and Duc Minh Vu, A* search algorithm for an optimal investment problem in Vehicle-Sharing system (3598)
10:45-11:05	Andrey Musayev and Dmitry Grigoryev, Evolutionary Parameter Optimization: A Novel Control Strategy for Chaotic Environments (9214)
11:05-11:25	Hoang Giang Pham, The Matheuristic for Building Cost-Constrained Decision Trees with Multiple Condition Attributes (1870)
11:25-11:55	Zhiyuan Dong, Yihan Wang and Yang Zhou, Maximizing regularized DR-submodular functions on a convex set (8796)
11:50-13:30	<i>Lunch</i>
13:30-14:30	Session Tue-1B Optimization 2 Chairs: Duc Minh Vu and Trung Thanh Nguyen Location: Room G, A1 Building
13:30-13:50	Canh Pham, Quat Phu and Dung Ha, Fast Bicriteria Approximation Algorithm for Minimum Cost Submodular Cover Problem (4249)
13:50-14:10	Hoang Giang Pham, Toan Tran. Mixed Integer Linear Programming-based Methods for The Optimal Time-Constrained Cost-Sensitive Decision Tree (6710)
14:10-14:30	Duc Minh Vu, Mike Hewitt and Duc D. Vu, Solving Time-Dependent Traveling Salesman Problem with Time Windows under Generic Time-Dependent Travel Cost (5159)
14:30-14:50	Tan Tran, Canh Pham, Dung Pham and Uyen Nguyen. Improved Streaming Algorithm for Minimum Cost Submodular Cover Problem (3985)
14:50-15:00	<i>Coffee break</i>
15:00-17:00	Session Tue-1C Security and blockchain Chairs: David Mohaisen Location: Room G, A1 Building

15:00-15:20	Mohammed Alqadhi and David Mohaisen, The Infrastructure Utilization of Free Contents Websites Reveal their Security Characteristics: A Correlation Analysis (4849)
15:20-15:40	Kha Nguyen Hoang, Nguyen The Anh, Quy Lu, Khoa Tran Dang, Hien Nguyen Quang, Le Khanh Tung, Nam Tran Ba, Vinh Nguyen Thanh, Khiem Huynh, Bang Le Khanh, Thuan Tran Quoc, Minh Nguyen Van, Ngan Nguyen Thi Kim, Minh Triet Nguyen and Son Ha Xuan, Towards a management system of blood and its products based on Blockchain, smart contracts, and NFT: a case study in Vietnam (3354)
15:40-16:00	Hung Tran, Hung Pham Ngoc, Van Nhan Vo, Xuan-Truong Quach, Tung Pham Huu, Long Nguyen Quoc and Giang Quynh Le Vu. Secure Conversation: A View From Physical Layer (3638)
16:00-16:20	Ayodeji Adeniran and David Mohaisen, Understanding the Utilization of Cryptocurrency in the Metaverse and Security Implications (6100)
16:20-16:40	Khiem Huynh, Huong Hoang Luong, Minh Triet Nguyen, Quy Lu, Phuc Nguyen Trong, Son Ha Xuan, Hien Nguyen Quang, Le Khanh Tung, Nam Tran Ba, Khoa Tran Dang, Vinh Nguyen Thanh, Bang Le Khanh, Kha Nguyen Hoang, Thuan Tran Quoc, Minh Nguyen Van and Ngan Nguyen Thi Kim, Blockchain and IoT for Enhanced Traceability in Waste Treatment Processes: A Microservice and Brokerless Approach (7173)
16:40-17:00	Ngan Nguyen Bui Kim, Tram Nguyen Binh Thuc, Tuan-Dung Tran, Duy Phan The and Van-Hau Pham, MIDAS: A Multi-chain Interoperable Data and Access System for Healthcare (3782)
18:00-20:00	Gala dinner - Location: 17 th floor, Building A1 Speech by representatives of NEU and Tra My Thai Best paper award ceremony
Conference Day 3 – December 13, 2023 (Wednesday)	
8:00-11:35	Session Wed-1A (Social) network analysis Chairs: Alexander Semenov and Trung Thanh Nguyen Location: Room G, A1 Building
08:00-08:20	Asep Maulana and Johannes Langguth, Leveraging GNNs and Node Entropy for Anomaly Detection: Revealing Misinformation Spreader on Twitter Network. (902)
08:20-08:40	Ali Yassin, Hocine Cherifi, Hamida Seba and Olivier Togni, Air Transportation Network Backbone Extraction: A Comparative Analysis of Structural Filtering Techniques (1101)
08:40-09:00	Andrzej Jarynowski, Alexander Semenov, Łukasz Czekaj and Vitaly Belik, Multiplex network approach for modeling the spread of African swine fever in Poland (6488)
09:00	Akshat Gaurav, Brij B. Gupta, Kwok Tai Chui and Varsha Arya, Deep Learning Based Model for Stress Measurement in Online Social Networks (7608)

09:20-09:40	Tie Hua Zhou, Jinwei Wang, Ling Wang, Haoyu Hao and Tianshuo Bi, Stress Expression Identification Model for Emotion-Driven Association Calculation over Social Network Blogs (7755)
09:40-09:55	<i>Coffee break</i>
09:55-10:15	Muhammad Khan, Rachel Gordon, Nimra Khan, Madeline Moran, Mohammed Abuhamad, Loretta Stalans, Jeffrey Huntsinger, Jennifer Forestal and Eric Chan-Tin, Identification and Analysis of the Spread of {Mis}information on Social Media. (8597)
10:15-10:35	Liman Du, Wenguo Yang and Suixiang Gao, Modeling the change of public opinion caused by opinion posts' dissemination in social networks (8921)
10:35-10:55	Xiang Li, Gagan Agrawal, Ruoming Jin and Rajiv Ramnath, Scalable Deep Metric Learning on Attributed Graphs (9165)
10:55-11:15	Taisia Pimenova, Valeria Kolycheva, Alexander Semenov, Dmitry Grigoryev and Arsenii Pimenov, The Impact of News, Expert and Public Opinion on Painting Prices (9894)
11:15-11:35	Alexander Semenov, Alexander Nikolaev, Eduardo Pasilliao and Vladimir Boginski, Activation and Deactivation Phenomena in Online Social Media Network Cascade Propagation with Geographic Considerations (8701)
13:30-17:00	<i>Local tour</i>