Monday, December 13 (GMT Time)

08:00-08:15	**OPENING** Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	
08:15-08:20	**BREAK**	
	MM1: **Deep Learning and Applications 1** *Chairman: Trung Duy Pham* Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	**MM2**: **Operational Research and Applications 1** *Chairman: Lyes Benyoucef* Zoom link: https://bom.so/UmikE0 Zoom Meeting ID: 931 0542 6556
08:20-08:45	*A New Approach to the Improvement of the Federated Deep Learning Model in A Distributed Environment* **Thuan Le Duc, Huong Pham Van, Hiep Hoang Van and Khanh Nguyen Kim**	*Algorithms for Flow Shop with Job–Dependent Buffer Requirements* **Alexander Kononov, Julia Memar, and Yakov Zinder**
08:45-09:10	*Deep Networks for Monitoring Waterway Traffic in the Mekong Delta* **Thanh Nghi Do, Minh Thu Tran Nguyen, Thanh Tri Trang, and Tri Thuc Vo**	*A new mathematical model for Hybrid Flow Shop under time-varying resource and exact time-lag constraints* **Quoc Nhat Han Tran, Nhan Quy Nguyen, Hicham Chehade, Farouk Yalaoui, and Frédéric Dugardin**
09:10-09:35	*The Multi-objective Optimization of the Convolutional Neural Network for the Problem of IoT System Attack Detection* **Thi Hong Van Le, Van Huong Pham, and Hieu Minh Nguyen**	*Multi-objective Sustainable Process Plan Generation for RMS: NSGA-III vs New NSGA-III* **Imen Khettabi, Lyes Benyoucef, and Mohamed Amine Boutiche**
09:35-09:40	**BREAK**	
	MM3: **Machine learning and Applications 1** *Chairman: Thanh Nghi Do* Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	**MM4**: **Operational Research and Applications 2** *Chairman: Viet Hung Nguyen* Zoom link: https://bom.so/UmikE0 Zoom Meeting ID: 931 0542 6556

09:40-10:05	*Training Support Vector Machines for Dealing with the ImageNet Challenging Problem* **Thanh Nghi Do** and Hoai An Le Thi	*Traveling Salesman Problem with Truck and Drones: A case study of Parcel Delivery in Hanoi* **Quang Huy Vuong, Thi Huong Giang Dang, Trung Do Quang, and Minh Trien Pham**
10:05-10:30	*An Ensemble Learning Approach For Credit Scoring Problem: A Case Study of Taiwan Default Credit Card Dataset* **Duc Quynh Tran, Doan Dong Nguyen, Huu Hai Nguyen, and Quang Thuan Nguyen**	*MIP formulations for OWA Traveling Salesman Problems* **Thi Quynh Trang Vo** and **Viet Hung Nguyen**
10:30-10:55	*What to Forecast When Forecasting New Covid-19 Cases? Jordan and the United Arab Emirates as Case Studies* **Sameh Al-Shihabi and Dana Abu Abdoun**	*Bi-objective model for the distribution of COVID-19 vaccines* **Mohammad Amin Yazdani**, Daniel Roy, and Sophie Hennequin
10:55-11:00	**BREAK**	
11:00-12:00	**Plenary talk 1**: *DC programming and DCA: recent advances and trends* Speaker: **Hoai An Le Thi** Chairman: Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	
12:00-13:00	**BREAK**	
13:00-14:00	**Plenary talk 2**: *Artificial Intelligence, Data Sciences, and Optimization in Economics and Finance* Speaker: **Panos M. Pardalos** Chairman: Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	
14:00-14:05	**BREAK**	
	MA1: **Deep learning and Applications 2** *Chairman: Andrzej Nowakowski* Zoom link: https://bom.so/FO9Vt0 Zoom Meeting ID: 959 8802 6626	**MA2**: **Operational Research and Applications 3** *Chairman: Shaojie Tang* Zoom link: https://bom.so/UmikE0 Zoom Meeting ID: 931 0542 6556

14:05-14:30	*Training Deep Network Models for Fingerprint Image Classification* **Thanh Nghi Do and <u>Minh Thu Tran Nguyen</u>**	*Optimizing a Binary Integer Program by Identifying its Optimal Core Problem- a New Optimization Concept Applied to the Multidimensional Knapsack Problem* **<u>Sameh Al-Shihabi</u>**
14:30-14:55	*An Assessment of the Weight of the Experimental Component in Physics and Chemistry Classes* **Margarida Figueiredo, M. Lurdes Esteves, Humberto Chaves, <u>José Neves</u>, and Henrique Vicente**	*Beyond Pointwise Submodularity: Non-Monotone Adaptive Submodular Maximization subject to Knapsack and k-System Constraints* **<u>Shaojie Tang</u>**
14:55-15:20	*Optimal Control in Learning Neural Network* **Marta Lipnicka and <u>Andrzej Nowakowski</u>**	*Exploring options for carbon abatement in the petroleum sector: a supply chain optimization-based approach* **<u>Otman Abdussalam</u>, Nuri Fello, and Amin Chaabane**

Tuesday, December 14 (GMT Time)

	TM1: DC Programming and DCA *Chairman: Yi-Shuai Niu* Zoom link: https://bom.so/08NC46 Zoom Meeting ID: 956 5178 5984	TM2: Operational Research and Applications 4 *Chairman: Takayuki Shiina* Zoom link: https://bom.so/muQIGe Zoom Meeting ID: 987 2366 6264
08:30-08:55	*DCA for Gaussian Kernel Support Vector Machines with Feature Selection* **Hoai An Le Thi and Vinh Thanh Ho**	*Optimal operation model of heat pump for multiple residences* **Yusuke Kusunoki, Tetsuya Sato, and Takayuki Shiina**
08:55-09:20	*Solving a centralized dynamic group key management problem by an optimization approach* **Thi Tuyet Trinh Nguyen, Hoang Phuc Hau Luu and Hoai An Le Thi**	*Revenue management problem via stochastic programming in the aviation industry* **Mio Imai, Tetsuya Sato, and Takayuki Shiina**
09:20-09:45	*A Boosted DCA with Power-Sum DC Representation for Linear Constrained Polynomial Program* **Hu Zhang and Yi-Shuai Niu**	*Stochastic programming model for lateral transshipment considering rentals and returns* **Keiya Kadota, Tetsuya Sato, and Takayuki Shiina**
09:45-10:10	*A Refined Inertial DC Algorithm for DC Programming* **Yu You and Yi-Shuai Niu**	
10:10-10:20	**BREAK**	
	TM3: Optimization methods *Chairman: Frédéric Dambreville* Zoom link: https://bom.so/muQIGe Zoom Meeting ID: 987 2366 6264	TM4: Communication Network and Cryptography *Chairman: Quang Trung Do* Zoom link: https://bom.so/08NC46 Zoom Meeting ID: 956 5178 5984
10:20-10:45	*Bayesian optimization based on simulation conditionally to subvariety* **Frédéric Dambreville**	*Implementation of XTS - GOST 28147-89 with Pipeline Structure on FPGA* **Binh Nhung Tran, Ngoc Quynh Nguyen, Ba Anh Dao and Chung Tien Nguyen**

10:45-11:10	*A Comparison Between Optimization Tools to Solve Sectorization Problem* **Aydin Teymourifar, Julian Blank, Ana Maria Rodrigues, Jose Soeiro Ferreira and Cristina Lopes**	*4×4 recursive MDS matrices effective for for implementation from Reed-Solomon code over GF(q) field* **Luong Tran Thi, Cuong Nguyen Ngoc and Trinh Bui Duc**
11:10-11:35	*Clarke Subdifferential, Pareto-Clarke critical points and descent directions to multiobjective optimization on Hadamard manifolds* **Erik Papa Quiroz, Nancy Baygorrea and Nelson Maculan**	*Maximizing Achievable Rate for Incremental OFDM-based Cooperative Communication Systems with Out-of-band Energy Harvesting Technique* **You-Xing Lin, Tzu-Hao Wang, Chun-Wei Wu and Jyh-Horng Wen**
11:35-12:00	*An Interior Proximal Method with Proximal Distances for Quasimonotone Equilibrium Problems* **Erik Papa Quiroz**	*Estimation and Compensation of Doppler Frequency Offset in Millimeter Wave Mobile Communication Systems* **Van Linh Dinh and Van Yem Vu**
12:00-13:00	**BREAK**	
13:00-14:00	**Plenary talk 3:** *Computationally Relevant Generalized Derivatives: Theory, Evaluation and Applications* Speaker: **Paul Barton** Chairman: Zoom link: https://bom.so/08NC46 Zoom Meeting ID: 956 5178 5984	
14:00-14:05	**BREAK**	
	TA1: Machine learning and Applications 2 *Chairman: Hoai Minh Le* Zoom link: https://bom.so/muQIGe Zoom Meeting ID: 987 2366 6264	**TA2: Operational Research and Applications 5** *Chairman: Duc Quynh Tran* Zoom link: https://bom.so/08NC46 Zoom Meeting ID: 956 5178 5984
14:05-14:30	*Measuring Semantic Similarity of Vietnamese Sentences based on Lexical and Distribution Similarity* **Van Tan Bui and Phuong Thai Nguyen**	*Exploiting Demand Prediction to Reduce Idling Travel Distance for Online Taxi Scheduling Problem* **Van Son Nguyen, Quang Dung Pham, and Van Hieu Nguyen**
14:30-14:55	*The effect of machine learning demand forecasting on supply chain performance-The case study of coffee in Vietnam* **Thi Thuy Hanh Nguyen, Abdelghani Bekrar, Thi Muoi Le, and Mourad Abed**	*Efficiently fair dial-a-ride problem with time-windows* **Viet Hung Nguyen and Minh Hieu Nguyen**

| 14:55-15:20 | *ILSA Data Analysis with R Packages*

Laura Ringiené, Julius Zilinskas, and Audroné Jakaitiené | |