

COMOSA 2025 – PROGRAM SCHEDULE

Time	Location	Submission ID	Activity
Day 01			Friday, August 15 th , 2025
08:30 – 09:00	C401		Welcome & Check-in
09:00 – 09:30			Opening ceremony Welcome remarks – Prof. Laurent El Ghaoui, VinUniveristy Opening speech – Dr. Le Minh Ha, VIASM Conference Overview & Program Summary - Assoc. Prof. Nguyen Ngoc Doanh, VinUniversity
09:30 – 10:15			Session Chair: Assoc. Prof. Nguyen Ngoc Doanh Keynote Speech 1 Modeling to support sustainability science: how open agent-based platforms can foster transdisciplinary approaches Prof. Alexis Drogoul, Ummisco, IRD, France
10:15 – 10:30			Tea Break
10:30 – 12:10			Session 1 Session Chair: Dr. Mohd Hafiz Mohd, School of Mathematical Sciences, Universiti Sains Malaysia
10:30 – 10:50		5	Optimizing Production and Inventory Dynamics An Advanced EPQ Model for Modern Supply Chains <i>Sani Rabiou, Majid Khan Majahar Ali</i>
10:50 – 11:10		25	A Simulation-based Optimization Approach for Patient Admission Scheduling Problem Under Uncertainty <i>Luu Nguyen Minh Thu, Ha Thi Xuan Chi, Phung Duc Bao, Nguyen Thi Phuong Anh, Huynh Nguyen Kim Ngan, Nguyen Hoang Thai Cong, Cao Duong Bao Ngoc</i>
11:10 – 11:30		99	Comparative Analysis of Temporal Deep Learning Models for Flood Level Forecasting: A Case Study in the Gianh River Basin <i>Nguyen Viet Hoang, Vu Huong Ngan, Nguyen Ngoc Doanh, Dinh Nhat Quang</i>
11:30 – 11:50		7	Time-Resolved Exergy Optimization of Hybrid Solar Dryers Using Finite Element Modeling and Multi-Dimensional Trade-Off Analysis <i>Ibrahim Adamu Mohammed, Majid Khan Majahar Ali</i>
11:50 – 12:10		18	Enhancing Learning to Cuts Approach for Solving NP-hard Problems <i>Truong Ngoc Thao Vy, Nguyen Van Hop</i>
12:10 – 13:30	Hospitality Lab/ Canteen		Lunch
13:30 - 14:15	C401		Session Chair: Dr. Hà Minh Hoàng, National Economics University , Vietnam Keynote Speech 2 The Integrated Healthcare Timetabling Competition (IHTC-2024): Formulation, Rules, Results, and Solution by Local Search Prof. Andrea Schaerf, DPIA, University of Udine, Italy
14:15 – 14:30			Tea Break

14:30 – 16:50			Session 2 Session Chair: Dr. Huynh Thi Thanh Binh, Hanoi University of Science and Technology
14:30 – 14:50		31	A Hybrid Genetic Search for Energy-Aware Multi-Trip Drone Routing with Time-Windows <i>Tuan Anh Pham, Minh Hoàng Hà, Duc Minh Vu, Duc Dong Do</i>
14:50 – 15:10		37	Complete Coverage Path Planning Framework for Oil Tank Inspection Robots in Unstructured Environments <i>Nguyen Thi Lan , Trinh Duc Minh, Tran Tan Chuc, Le Văn Sỹ</i>
15:10 – 15:30		42	An efficient branch-and-bound algorithm for solving a new variant of the university course timetabling problem <i>Quang Dung PHAM, Thuy Chau TRAN, Van Son NGUYEN, Quoc Trung BUI</i>
15:30 – 15:50		27	Ultrasonic material characterization using physics-informed deep learning <i>Ductho Le , Hongphuc Nguyen, Le Ngo Duc Manh, Xuan Bao Tran, and Haidang Phan</i>
15:50 – 16:10		38	Implementing Computer Vision for Pipeline Defect Detection <i>Phan Nguyen Ky Phuc, Tran Kiet Tuong, Nguyen Thi My Hanh</i>
16:10 – 16:30		40	Addressing data imbalance to enhance water level forecasting quality <i>Minh-Ngoc T. Nguyen, Kim-Ngan T. Nguyen, Dinh Nhat Quang, Doanh Nguyen-Ngoc</i>
16:30 – 16:50		102	A Scenario-Based Optimization Model for Seasonal Procurement Under Demand Uncertainty <i>Mai-Ha Phan, Uyen Ly Do Ngoc, The Vy Nguyen, Nhat Toan Nguyen, Nguyen Hung Doan, Minh Thi Phan</i>
16:50 – 17:15	VinUni Campus		Campus Tour/ Net-working
17:15 – 17:45	Ocean Park Lagoon		Proceed to the Gala Dinner venue
17:45 – 20:00			Gala Dinner
Day 02			Saturday, August 16th, 2025
08:30 – 09:00	C401		Welcome & Check-in
09:00 – 12:30			Session 3 Session Chair: Dr. Nguyen Thi Kim Ngan, National Economics University, Vietnam
09:00 – 09:20		43	Multi-Goal Path Planning for Multi-Robot Systems in Dynamic Environments Using Hybrid A* Algorithm and Dynamic Window Approach <i>Nguyen Trung Thinh, Phan Anh, Tran Thi Cam Giang, Nguyen Ngoc Doanh</i>
09:20 – 09:40		34	A Continuous-Time Framework for Adaptive Asset Allocation <i>Phuong-Nam Nguyen, Thang Tran Ngoc</i>
09:40 – 10:00		52	Facial Expression Recognition with Identity-Normalized Landmark Features <i>Viet Hung Tran, Ngoc Son Tran, Thi Phuoc Van Nguyen, Hung Tran, Duc Minh Tran</i>
10:00 – 10:20		94	Deep Temporal-Spatial Learning for Early Prediction of Human Blastocyst Formation from Time-Lapse Videos <i>Minh-Duc Pham, Quang-Anh Nguyen-Duc, Van-Quang Nguyen, Minh-Anh Nguyen</i>
10:20 – 10:35			Tea Break
10:40 – 11:00		100	Transparent AI for Disaster Management: Explainable Landslide Prediction Models to Support Decision-Making <i>Quang-Anh N. D , Ha Phuong Vu , Duong Le Tung Ba, Nga Phung Mai, Hoa Do Thanh</i>

11:00 – 11:20		20	Ruin probabilities of risk models with dependent claim sizes <i>Nguyen Huy Hoang, Tran Dinh Phung</i>
11:20 – 11:40		46	Vehicle-to-Grid Based Smart Charging Strategy for Electric Vehicles in Urban Microgrids: A Case Study in Ho Chi Minh City <i>Ho Nhat An, Pham Thi Lan Huong, Trinh Duc Minh, Nguyen Duy Ninh, Nguyen Thi Lan, Nguyen Thai Vinh, Bui Dang Thanh</i>
11:40 – 12:00		48	Cost Optimization in Choice-based Competitive Facility Location: An Exact Approach <i>Luat Le, Thuy Anh Ta</i>
12:00 – 13:30	Hospitality Lab/ Canteen		Lunch
13:30 – 16:40			Session 4 Session Chair: Dr. Vu Duc Minh, National Economics University, Vietnam
13:30 – 13:50	C401	62	A Dynamic Disruption Recovery Model for Multi-Layer Supply Networks <i>Ngan Duong, Uyen Nguyen, Trang Pham, Luong Doan, Tuan Do</i>
13:50 – 14:10		65	Electric Traveling Salesperson Problem with Wireless Charging Lanes: A Mathematical Programming Approach <i>Trung Duc Tran, Duc Minh Vu, Ngoc Doanh Nguyen, Gia Nguyen Pham, Laurent El Ghaoui</i>
14:10 – 14:30		49	Learning from the Crowd: LLMs as Expert Filters for Multi-Agent Decision Making <i>Thuy Anh Ta, The Viet Bui, Tien Mai</i>
14:30 – 14:50		107	An Integrated Fuzzy MCDM–Stochastic Optimization Approach for Sustainable and Resilient Supplier Selection and Order Allocation Under Pandemic Disruptions <i>Dang Kieu Giang, Ha Thi Xuan Chi, Pham Huynh Tram, Nguyen Le Minh Hoa, Nguyen Thi Phuong Anh</i>
14:50 – 15:05			Tea Break
15:10 – 15:30		17	An adaptive algorithm utilizing the Fama-French three-factor model for improving portfolios <i>Quoc Huy Vu, Phuong Hoai Ngoc Nguyen, Hung Tran, Duc Minh Tran</i>
15:30 – 15:50		63	Examining the Nexus between Green Growth Indicators and Economic Growth: Panel Data Evidence and Policy Insights <i>Phan Nhan Trung, Huynh Minh Sang, Nguyen Thu Thuy, To Van Tuan</i>
15:50 – 16:10		74	Impact of Different Contents generated by Human and AI on Social Media Engagement <i>Tran Thi My Hanh</i>
16:10 – 16:20 (10p)		85 (abstract)	High-Order Optimization for Equity–Crypto Portfolios <i>Nam Tran, Trieu Dong Nguyen</i>
16:20 – 16:30 (10p)		89 (abstract)	Multi-Material Topology Optimization of Incompressible Structures Under Harmonic Excitations Using Polygonal Finite Elements <i>NHieu Ban Phuc, Tran Le Thi Huyen, Lee Dongkyu, Choi Kyuin, Park Kyutae</i>
16:30 – 16:40 (10p)		90 (abstract)	Complex Dynamics in COVID-19 Endemicity: An Epidemiological Modelling Perspective <i>Amer M. Salman, Mohd Hafiz Mohd</i>
16:40 – 17:00			Closing Speech & Group Photos Assoc. Assoc. Prof. Nguyen Ngoc Doanh, VinUniversity