WORKSHOP ON ENVIRONMENTAL INTELLIGENCE AND SUSTAINABLE DESIGN

Wednesday, December 20, 2023 - VinUniversity

Segment		Time	Description	Speaker	Location
I. REGISTRATION					
Registration		08:30 – 09:00	Welcoming guest speakers and attendees.		
II. PLENARY					
Opening remarks		9:00 - 9:10	Vice Provost Prof. Laurent El Ghaoui delivers opening remark	Laurent El Ghaoui	C401
Distinguished Lecture - Alexandre Bayen		09:10 - 09:35	Prof. Alexandre delivers talk on MegaVanderTest and traffic optimization	Alexandre Bayen (UC Berkeley)	
Distinguished Lecture - Helen Nguyen		09:35 - 10:00	Prof. Helen delivers talk on Climate Change Adaptation and Mitigation	Helen Nguyen (UIUC)	
III. COFFEE BREAK AND DEMO					
Demo demonstration		10:00 - 10:05	Team members showcase and explain demo a. Ocean Park Air b. Hoan Kiem Air + VR c. RAC + VR		C401
Coffee break		10:05 - 10:30	Demo showcase		
			Cake and drink buffet		
IV. MORNING PARALLEL PANELS					
Environmental Monitoring	Air pollution	10:30 - 11:00	Monitoring emission in Vietnam: The building blocks; Digital twins to app	Laurent El Ghaoui, Jenny Chung, Nguyen Ngoc Doanh	C401
		11:00 - 11:20	QnA		
	Carbon stock	11:20 - 11:35	Multi-Modal Remote Sensing Data for Biodiversity Assessment and Carbon Stock Estimation in Vietnam Forests	Nidal Kamel	
		11:35 - 11:45	QnA		
	Ethnic minority	11:45 - 11:55	Environmental Intelligence and ethnic minorities	David Harrison	
		11:55 - 12:00	QnA		
AI for Materials Design		10:30 - 10:45	MOFs project	Zichao Rong (UC Berkeley)	C402
		10:45 - 11:00	Nanocomposite	Ahmad Hajjar	
		11:00 - 11:15	ExPT: Synthetic Pretraining for Few-Shot Experimental Design	Tung Nguyen (UCLA)	
		11:15 - 11:30	PM 2.5/Materials Characterization via Image Machine Learning	Le Duy Dung/Tri Nhan	
		11:30 - 11:45	Machine learning for Magnetic materials	Lam (Phenikaa)	
		11:45 - 12:00	Integrated Organic devices and Systems for physical AI	Nguyen Dang Tung	

		V. LUNCH BREAK AND DEMO			
Lunch break	Lunch	12:00 - 13:00	Lunch for general audience and Advisory Board		
	Demo		Demo showcase a. Ocean Park Air b. Hoan Kiem Air + VR c. RAC + VR		
		VI. AFTERNOON PARALLEL PANELS			
Living lab		13:00 - 13:10	Opening Speech and introduction	Nguyen Ngoc Doanh	C401
		13:10 - 13:25	Modelling & Simulation for Sustainability Science	Alexis Drogoul (ACROSS, IDR)	
		13:25 - 13:40	Traffic Simulation and Air Quality/Health Impact	Helen Nguyen (UIUC)	
		13:40 - 13:55	Traffic Flow	Prof. Nguyen Thu Huyen (UTC) & Antony (Berkeley)	
		13:55 - 14:10	Optimization for Smart Charging: The example of Charging station at VinUni Campus	Riadh Zorgati (EDF, France)	
		14:10 - 14:30	Discussion & Conclusion	Nguyen Ngoc Doanh	
Advanced materials		13:00 - 13:15	Modified TiO2 Nanoparticles for Photocatalytic Treatment of Organic Pollutants in Aqueous Media	Nguyen Van Anh (HUST)	C402
		13:15 - 13:25	QnA		
		13:25 - 13:40	Solar-driven water evaporation-induced electricity for sustainable development	Dao Van Duong (Phenikaa)	
		13:40 - 13:50	QnA		
		13:50 - 14:05	Fabrication of porphyrin-based nanomaterials and their application for environmental treatment	La Duc Duong (ICM)	
		14:05 - 14:15	QnA		
		14:15 - 14:30	Lithium-ion battery thermal runaway and early warning techniques	Le Phuoc Anh	
		V. COFFEE BREAK			
Coffee break		14:30 - 15:00	Cake and drink buffet		
		VI. DESIGN THINKING CHALLENGE			
Design thinking segment		15:00 - 16:00	Team organization		C401
			Questions will be shared in advance		
			Teams work on solutions for 15-20 minutes		
			3-minute presentation		
			Peer reivew		
		VII. AWARDS AND CLOSING			
Closing		16:00 - 16:30	Prize presenting		C401
			Closing remark		