NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

AIDA-AT 2020 Conference, Nanyang Technological University, Singapore

HOME   COMMITTEES / SPEAKERS   PROGRAMME   SOCIAL EVENTS   BUS SCHEDULE   VENUE   REGISTRATION   CONTACT

Events   AIDA-AT 2020 Conference   Programme

AIDA-AT 2020 PROGRAMME

- Papers are to presented in order as shown in the agenda below.
- Presentation schemes:
    -- Keynote presentation: 25 minutes talk + 5 minutes Q&A
    -- Regular presentation: 20 minutes talk + 5 minutes Q&A
    -- Short presentation: 10 minutes talk + 5 minutes Q&A

Download the conference programme in PDF:
http://event.ntu.edu.sg/AIDAAT2020/Documents/AIDA-AT-2020-Programme.pdf

Date	Session	Paper ID	Authors / Speakers	Paper / Presentation Title	Presentation Scheme
DAY 1 Monday 3 Feb 2020 Morning			**8:15 - 8:45** Conference Registration		
			8:45 - 9:30 Welcome and Conference Opening		
			Prof. Louis Phee, Dean of the College of Engineering, Nanyang Technological University, Singapore Prof. Vu N. Duong, General Chair, AIDA-AT 2020, Director of Air Traffic Management Research Institute (ATMRI), NTU Singapore A/Prof. Sameer Alam, Conference Co-Chair, AIDA-AT 2020		
	KEYNOTE SESSION 1A 9:30 - 10:30	KN1	Invited Speaker: **Professor Jean-Marc Alliot**	In medio stat virtus	Keynote
		KN2	Invited Speaker: **Professor Laurent El Ghaoui**	Natural Language Processing for ATM Applications	Keynote
			Coffee break 10:30 - 11:00		
	KEYNOTE SESSION 1B 11:00 - 12:00	KN3	Invited Speaker: **Professor Jacco Hoekstra**	Challenges of using Open Data & Open Source in ATM Research	Keynote
		KN4	Invited Speaker: **Professor Hussein A. Abbass**	Apprenticeship Bootstrapping: Intelligent Shepherds for Swarm Traffic Management Systems	Keynote
			LUNCH 12:00 - 13:00		
DAY 1 Monday 3 Feb 2020 Afternoon	**TECHNICAL SESSION 1** 13:00 - 15:05 **AI for ATM Safety** Session chair: **Nicolas Durand**	27	Narendra Pratap Singh, Sim Kuan Goh and Sameer Alam	Real-time Unstable Approach Detection Using Sparse Variational Gaussian Process	Regular
		29	Rihab Khemiri, Mohamed Naija and Ernesto Exposito	Using formal methods to Safety Analysis in Unmanned Aerial Vehicle	Short
		33	Hasnain Ali, Raphael Delair, Sameer Alam and Michael Schultz	Dynamic conflict hot spots on airport taxiways	Short
		37	Lu Dai and Mark Hansen	Real-time Prediction of Runway Occupancy Buffers	Regular
		22	Zhengyi Wang, Man Liang and Daniel Delahaye	Data-driven Conflict Detection Enhancement in 3D Airspace with Machine Learning	Short
		38	Paveen Juntama, Supatcha Chaimatanan, Sameer Alam and Daniel Delahaye	A Distributed Metaheuristic Approach for Complexity Reduction in Air Traffic for Strategic 4D Trajectory Optimization	Short
		19	Vincent de Vries	Classification of Aviation Safety Reports using Machine Learning	Short
			Coffee break 15:05 - 15:30		
	TECHNICAL SESSION 2 15:30 - 16:50 **Machine Learning for ATM Predictions** Session chair: **Michael Schultz**	4	Richard Alligier	Predictive Joint Distribution of the Mass and Speed Profile to Improve Aircraft Climb Prediction	Regular
		24	Andreas Brieden and Peter Gritzmann	Predicting show rates in air cargo transport	Short
		9	Gabriel Jarry, Daniel Delahaye and Eric Feron	Approach and landing aircraft on-board parameters estimation with LSTM networks	Regular
		1	Philippe Monmousseau, Gabriel Jarry, Florian Bertosio, Daniel Delahaye and Marc Houalla	Predicting passenger flow at Charles De Gaulle airport security checkpoints	Short
			19:00 - 21:30 Conference Dinner Refer to Social Events page for more information		

Date	Session	Paper ID	Authors / Speakers	Paper / Presentation Title	Presentation Scheme
DAY 2 Tuesday 4 Feb 2020 Morning	**KEYNOTE SESSION 2A** 9:00 - 10:00	KN5	Invited Speaker: **Professor Mark Hansen**	Fuel for Thought: Reflections on my Fuel Loading Data Adventure	Keynote
		KN6	Invited Speaker: **Professor Daniel Delahaye**	The Bridge Between Meta-Heuristics and Simulation: Application to ATM	Keynote
			Coffee break 10:00 - 10:30		
	KEYNOTE SESSION 2B 10:30 - 12:00	KN7	Invited Speaker: **Professor Henk Blom**	Agent-based Modelling and Simulation of future ATM	Keynote
		KN8	Invited Speaker: **Professor Kozo Fujii**	Cellular Automaton Air Traffic Flow Simulators toward Efficient and Robust Managements	Keynote
		KN9	Invited Speaker: **Dr. Banavar Sridhar**	Observations on the Application of Machine Learning Techniques to Aviation Operations	Keynote
			LUNCH 12:00 - 13:00		
DAY 2 Tuesday 4 Feb 2020 Afternoon	**TECHNICAL SESSION 3** 13:00 - 15:05 **AI for Operational Efficiency** Session chair: **Rainer Koelle**	31	Michael Schultz, Xavier Olive, Judith Rosenow, Hartmut Fricke and Sameer Alam	An ADS-B based milestone concept for the management of airport ground operations	Regular
		3	Jaime Rubio, Abhishek Gupta, Yew-Soon Ong and Mahmut Reyhanoglu	Pay-per-flight Dynamic Pricing of UAV Operations	Short
		34	Shuwei Chen, Yanjun Wang, Minghua Hu, Ying Zhou, Daniel Delahaye and Siyuan Lin	Community Detection of Chinese Airport Delay Correlation Network	Short
		25	Gregoire Ky, Sameer Alam and Vu Duong	A traffic method for unmanned aircraft systems on a virtual closed circuit	Short
		6	David Gianazza and Nicolas Durand	Ant Colony Systems for Optimizing Sequences of Airspace Partitions	Regular
		30	Chunyao Ma, Qing Cai, Sameer Alam and Vu Duong	Airspace Capacity Overload Identification Using Collision Risk Patterns	Short
		5	Nang Laik Ma	Multi-Objective Gate Assignment Problem for An Airport	Short
			Coffee break 15:05 - 15:30		
	TECHNICAL SESSION 4 15:30 - 17:20 **Data-Driven ATM** Session chair: **Sameer Alam**	14	Max Z. Li, Karthik Gopalakrishnan, Yanjun Wang and Hamsa Balakrishnan	Outlier Analysis of Airport Delay Distributions in US and China	Regular
		26	Nam Tran, Thinh Pham and Sameer Alam	A Map-Matching Algorithm for Ground Movement Trajectory Representation using A-SMGCS Data	Short
		8	Evgenii Munin, Antoine Blais and Nicolas Couellan	Convolutional Neural Network for Multipath Detection in GNSS Receivers	Short
		7	Philippe Monmousseau, Aude Marzuoli, Daniel Delahaye and Eric Feron	Door-to-door air travel time analysis in the United States using Uber data	Short
		11	Kristofer Krus, Tatiana Polishchuk and Valentin Polishchuk	Identifying Interesting Moments in Controllers Work Video via Dimensionality Reduction	Short
		36	Banavar Sridhar	Application of Machine Learning Techniques to Aviation Operations: Promises and Challenges	Regular
			18:00 - 19:30 Hi-Tea and Tour to Radar and Tower Simulator at Air Traffic Management Research Institute (ATMRI), NTU Refer to Social Events page for more information		