SOFL+MSVL 2022 Program

24-Oct (GMT +9:00)	
	Opening & Keynote (Chairs: Shaoying Liu and Zhenhua Duan)
10:10-10:20	Opening
10:20-11:20	Keynote: Risks Management around Machine Learning Software *Shin Nakajima*
11:20-11:30	Break
	Section 1: Model Checking & Markov Decision Process (Chair: Zhenhua Duan)
11:30-12:00	Formal Derivation and Verification of Critical Path Algorithm for Directed Acyclic Graph *Zhen You, Xinwu Yi, Jinyun Xue, Hongwen Hu, Jiewen Huang and Zhuo Cheng*
12:00-12:30	An Approach of Transforming Non-Markovian Reward to Markovian Reward *Ruixuan Miao and Xu Lu*
12:30-13:00	A JPSL based Model Checking Approach for Java Programs *Xinfeng Shu and Yanlin Li*
13:00-14:00	Lunch
	Section 2: Model Analysis & Tool Implementation (Chair: Ai Liu)
14:00-14:30	Implementation of Matlab matfun Toolkit Based on MSVL *Xueqing Feng, Nan Zhang and Zhenhua Duan*
14:30-15:00	Extending Visibly Pushdown Automata over Multi-matching Nested Relations *Jin Liu, Yeqiu Xiao, Haiyang Wang and Wensheng Wang*
15:00-15:30	Feasibility analysis of concurrent digraph tasks in static priority systems *Jin Cui and Xu Lu*
15:30-15:40	Break
	Section 3: Formal Specification & Testing (Chair: Yuting Chen)
15:40-16:10	Formalization of natural language into PPTL specification via neural machine translation *Chunyi Li, Jiajun Chang, Xiaobing Wang, Liang Zhao and Wenjie Mao*
16:10-16:40	Testing Program Segments to Detect Runtime Exceptions in Java *Lei Rao, Shaoying Liu and Ai Liu*
16:40-17:10	Inferring Exact Domains to Generate Efficient and Valid Test Cases through Testing *Chu Chen, Xuan Wang, Pinghong Ren, Zhenhua Duan, Cong Tian, Xu Lu and Bin Yu*
17:10-17:20	Break
	Section 4: Algorithms & Verification (Chair: Xinfeng Shu)
17:20-17:50	Testing and Verifying the security of COVID-19 CT Images Deep Learning System with Adversarial Attack *Yang Li and Shaoying Liu*
17:50-18:20	Verifying and improving neural networks using testing-based formal verification *Haiyi Liu, Shaoying Liu, Ai Liu and Dingbang Fang*
18:20-18:50	A Case Study of APTL Model Checking *Haiyang Wang*
	Closing
18:50-19:00	Ai Liu and Shaoying Liu