2024 IEEE Workshop on Design Automation for CPS and IoT (DESTION) **DESTION 2024**

Table of Contents

Message from DESTION 2024 Chairs vi	i
DESTION 2024 Organizing and Program Committees	i
2024 IEEE Workshop on Design Automation for CPS and IoT (DESTION)	
Scalable HLA Co-Simulations of Connected and Automated Vehicles using Aggregation of Virtual Federates	1
A Signal Injection Attack Against Zero Involvement Pairing and Authentication for the Internet of Things Isaac Ahlgren (Loyola University Chicago), Jack West (University of Wisconsin-Madision), Kyuin Lee (University of Houston), George Thiruvathukal (Loyola University Chicago), and Neil Klingensmith (Loyola University Chicago)	9
Anvil: An Integration of Artificial Intelligence and Sampling Techniques with Combined CAD-CFD Tool	6
Fusion of ML with numerical simulation for optimized propeller design	2
Realistic and Lightweight Cyber Agent Training Environment using Network Emulation in Mininet	8

A Position Paper on Transforming Embedded Real-Time Systems to the Cloud: Challenges and New Research Directions	30
RAMPART: Reinforcement Against Malicious Penetration by Adversaries in Realistic Topologies Himanshu Neema (Vanderbilt University), Daniel Balasubramanian (Vanderbilt University), Harsh Vardhan (Vanderbilt University), Harmon Nine (Vanderbilt University), and Sandeep Neema (Vanderbilt University)	33
Libpanda Apps: Managing the Deployment and Reuse of a Cyber-Physical System	40
Towards Fairness-aware Crowd Management System and Surge Prevention in Smart Cities	46
Model-based Design Tool for Cyber-physical Power Systems using SystemC-AMS Rahul Bhadani (The University of Alabama in Huntsville), Satyaki Banik (North Carolina State University), Hao Tu (North Carolina State University), Srdjan Lukic (North Carolina State University), and Gabor Karsai (Vanderbilt University)	55
Author Index	63