

# Guest Editorial to the Special Section of L-CSS on Fragility and Resiliency in Cyber–Physical Discrete-Event Systems

**F**RAGILITY and resiliency have emerged as important research topics in the control of Cyber-Physical Systems (CPS), especially when the associated sensors and actuators may be compromised by malicious attackers. These problems have received increasing attention in the area of discrete event systems, where discrete abstractions of CPS are used to study resilient state estimation and supervisory control. A Call for Papers for this Special Section was issued in the fall of 2021, with a submission deadline of January 20, 2022. The submissions received were reviewed and revised according to the policies and timelines of L-CSS. Five Guest Associate Editors were invited to handle the submissions:

- Francesco Basile, University of Salerno, Italy
- Maria Pia Fanti, Polytechnic of Bari, Italy
- Sahar Mohajerani, Chalmers University of Technology, Sweden
- Yin Tong, Southwest Jiaotong University, China
- Xiang Yin, Shanghai Jiao Tong University, China

Four papers were accepted for inclusion in this Special Section, covering recent advances on opacity analysis for

modular systems, analysis of existence of sensor attacks and of vulnerabilities against them, and synthesis of resilient supervisors against actuator attacks.

We wish to thank the authors, reviewers, Guest Associate Editors, and the L-CSS Editorial Board and Editor-in-Chief for making this Special Section possible.

CHRISTOFOROS N. HADJICOSTIS

Department of ECE  
University of Cyprus  
1678 Nicosia, Cyprus

STÉPHANE LAFORTUNE

Department of EECS  
University of Michigan at Ann Arbor  
Ann Arbor, MI 48109 USA

CARLA SEATZU

Department of EEE  
University of Cagliari  
09124 Cagliari, Italy