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Advances in Attack Detection and Secure State Estimation for Cyber–Physical Systems (CPS)

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Deadline for manuscript submissions:
20 September 2025

Message from the Guest Editor

Cyber–physical systems (CPS) are sophisticated networks that integrate computational and physical elements, enabling a seamless interaction between digital and real-world environments. Attack detection is crucial as it enables the early identification of any cyber threats or malicious activities aimed at disrupting the normal operation of CPS. On the other hand, secure state estimation is the process of accurately assessing the current state of the system while ensuring its confidentiality and integrity. They are both essential in CPS. The aim of this Special Issue is to create a focused platform for discourse and progress surrounding the enhancement of attack detection and secure state estimation in cyber–physical systems (CPS). We seek to propel the development and application of innovative methodologies, ensuring the security and safety of CPS against evolving cyber threats.

Keywords

cyber–physical systems; attack detection; attack identification; secure state estimation; cyber attacks; data integrity; data security

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Message from the Editor-in-Chief

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