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# Models and Algorithms in Cybersecurity

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#### **Message from the Guest Editors**

Dear Colleagues,

With cyber attacks rising in both importance and volume every year, it is paramount to ensure that deployed code is free of known problems and audited for possible software problems, including interactions between software and hardware components. Digital Twins can be used, along with Data Mining and Deep Learning approaches, to predict and mitigate hardware interactions and a whole ecosystem of other tools that have grown in time into a full software platform and framework for cybersecurity assessment and predictions.

These tools have been the subject of intense research and development to raise their TRL levels to high, market-ready values that can already be used by end-user companies that are actively developing software and hardware components. The framework, composed of a set of tools and methodologies, will address the challenges related to vulnerability management, resilience, auditing of complex systems, risk analysis, mitigation strategies, and security certification harmonization.









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#### Message from the Editor-in-Chief

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