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## **Formal Approaches, Ontologies, and Standards for the Verification of Autonomous Systems**

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100-word abstract:

With the rising autonomy of devices, softwares, and systems, there is a clear need to provide convincing evidence of their safety, security, transparency, reliability, dependency, and resilience to users and other stakeholders. Consequently, verification, i.e. compelling evidence that autonomous systems satisfy their requirements, has become increasingly important, especially for building explainable technologies. As autonomous systems become more complex, with added intelligence and adaptive capabilities, the challenges for verification grow. Worldwide efforts to devise methodologies and develop tools related to the verification of autonomous systems are thus crucial, especially in terms of formal approaches, ontologies, as well as standards.