Chair of Security in Information Technology
TUM Department of Electrical and Computer Engineering
Technical University of Munich

Assistant (Student), Interdisciplinary Project, Master's Thesis, Bachelor's Thesis, Forschungspraxis

Hardware Trojan Detection Methods

Hardware Trojans are an emerging threat for application specific integrated circuits (ASICs) and field programmable gate arrays (FPGAs), as they affect all security principles, such as confidentiality, integrity and availability.

Various techniques for hardware Trojan detection (see e.g. [1]) exist at different levels of the circuit design flow. In this work, you will implement and evaluate existing methods, to gain knowledge about which method is suitable for respective use cases.

- [1] K. Xiao, D. Forte, Y. Jin, R. Karri, S. Bhunia, and M. Tehranipoor, “Hardware Trojans: Lessons Learned After One Decade of Research,” ACM Trans. Des. Autom. Electron. Syst., vol. 22, no. 1, p. 6:1–6:23, May 2016.

Contact

If you are interested in this topic, don't hesitate to ask for an appointment via

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Please include a grade report and a CV, so I can evaluate different focus areas to fit your experience.

Advisors

Alexander Hepp