



*Student Assistant (m/f/\*)*

## RISC-V Hardware Fuzzing

In recent years, RISC-V has attracted significant interest from academia and industry due to its openness. Its modular and extensible design, along with the transparency of the base ISA, provides a strong foundation for developing and analyzing secure hardware. At the same time, custom extensions and proprietary implementations can reintroduce “black box” components that are harder to scrutinize. This tension highlights the need for systematic assessment and testing of the security aspects of existing RISC-V cores.

### Task Description

In this project, techniques for hardware fuzzing from both academic literature and open-source projects, shall be reviewed to distill best practices and identify existing challenges. Based on these insights, a fuzzing setup shall be implemented and applied to existing RISC-V cores.

### Requirements

- High motivation and ability to work independently
- Ideally, basic knowledge of RISC-V ISA
- Ideally, basic knowledge of (hardware) fuzzing techniques

### Contact

Please send your application with current CV and transcript of records to:

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