Hardware Security with Side-Channel Analysis of SOCs (AISEC)

We are currently seeking students to join our research team for a practical experience in the field of hardware security. This opportunity offers hands-on experience in conducting side-channel analysis of System-on-Chips (SOCs).

Responsibilities

• Conduct literature research on hardware security and side-channel analysis techniques
• Build and use a measurement setup to collect side-channel data from SOCs
• Analyze the collected data and identify potential vulnerabilities
• Develop and implement potential attacks on the devices

Prerequisites

• Currently enrolled as a student in a relevant field (e.g., computer science, electrical engineering)
• Strong interest in hardware security and side-channel analysis
• Basic knowledge of computer architecture and embedded systems
• Proficiency with programming languages, especially Python
• Ability to work independently and in a team

This research practicum provides an excellent opportunity to gain practical experience in the exciting field of hardware security. If you are passionate about cybersecurity and eager to apply your knowledge in a real-world context, we encourage you to apply for this position.

To apply, please submit your resume, your transcript of records and a brief statement of interest highlighting your relevant experience and motivation for joining this research practicum.

Contact

Name: Valentin Huber
Email: valentin.huber@aisec.fraunhofer.de

Name: Marc Schink
Email: marc.schink@aisec.fraunhofer.de

Advisors

Georg Sigl
Valentin Huber + Marc Schink (Fraunhofer AISEC)