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

TLM

Forschungspraxis, Interdisciplinary Project, Master's Thesis

Error Correction for PUFs

Each integrated ciruict is subject to process variations. PUFs can derive secret keys from this fingerprint-like feature of a device. To ensure stable cryptographic keys error correction is needed.

If this might be interesting for you, feel free to contact me. With this position, I am not targeting a specific topic, but it is rather a nice opportunity work on any kind of error correction topic for PUFs. Depending on your kind of thesis/internship, your background and knowledge, and most importantly your interests, we can try to find a suitable topic together.

Prerequisites

Helpful previous knowledge:

- Error correcting Codes
- PUFs

Helpful Tools (you will not need all of them at once most likely)

- Python
- Matlab
- Verilog (for FPGA)
- Reading Papers
- C (e.g for Microcontroller)

Advisors

Christoph Frisch