

– Master-/Bachelor Thesis – Multi-Biometric Template Protection

da/sec



da/sec is the biometrics and Internet security research group and is affiliated with University of Applied Sciences Darmstadt and the National Research Center for Applied Cybersecurity (ATHENE). The group is led by Prof. Dr. Christoph Busch. The focus of the group is on highly innovative and applied IT security research in the special fields of biometrics and internet security. Read more on www.dasec.h-da.de.

Motivation & Goal

Biometric data is considered sensitive personal information by the GDPR and therefore needs to be protected. Homomorphic Encryption (HE) allows computations on encrypted data without access to the decryption key. Therefore, computation on sensitive data can be outsourced. The goal of this project is to investigate how HE can protect multi-biometric templates

Tasks

- Implement baseline and protected multi-biometric comparison
- Benchmark the implementation
- Assess performance, security and privacy

We offer

- Incentives for the student to work on this project (work within scientific context, international collaboration, work on project in collaboration with companies)

Requirements

- High motivation and creativity
- Analytical and programming skills
- Strong interest in research

By Date

By now / by appointment

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