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# Master-/Bachelor Thesis – Efficient Contact-less Multi-Finger Authentication

# da/sec



da/sec is the biometrics and internet security research group and is affiliated with University of Applied Sciences Darmstadt and the Center for Research in Security and Privacy (CRISP). The group is led by Prof. Dr. Harald Baier and Prof. Dr. Christoph Busch. The focus of the group is on highly innovative and applied IT security research in the special fields of biometrics, internet security and digital forensics. Read more on <a href="https://www.dasec.h-da.de">www.dasec.h-da.de</a>.

#### Motivation & Goal

Fingerprint recognition based on multiple fingers enable reliable biometric authentication. A contactless acquisition of fingerprints improves the usability of the biometric system. However, improvement in biometric performance as a result of biometric fusion should be weighed against the associated overhead involved, such as processing time.

The goal of this project is to develop enhanced fusion techniques to achieve real-time biometric identification in a contactless multifinger biometric system.

#### **Tasks**

- Implementation of Multi-finger biometric system
- Design/implementation of efficient identification approach

#### 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
- Good programming skills
- Good analytical skills
- Interest in biometric recognition

## By Date

By now / by appointment

## Contact

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