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## – Master/Bachelor Thesis – Biometric Data Compression

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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 [www.dasec.h-da.de](http://www.dasec.h-da.de).

**Motivation & Goal**

With the growing size of biometric system deployments, as well as advent of products such as biometric documents and payment cards, efficient data storage becomes an important matter. One of matters of interest is decreasing the size of stored biometric templates without causing a loss of system accuracy. The goal of this project is to use existing and to propose new (potentially machine learning based) methods of compressing the biometric feature vectors and evaluate them in terms of representation compactness and biometric performance (accuracy).



**Tasks**

- Independent research into compact feature vector representations for facial and/or fingerprint data
- Evaluation and benchmark of the existing and proposed methods

**Requirements**

- High motivation and creativity
- Strong interest in research
- Good programming skills
- Good analytical skills

**By Date**

By now / by appointment

**Contact**

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