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## – Master/Bachelor Thesis – Facial Soft Biometrics

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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**

Soft biometric traits, e.g. gender or eye colour, can be effectively used to assist traditional biometric recognition systems. The facial region is a particularly rich source of such features. The goal of this project is to implement a framework and/or GUI for automatic extraction of soft biometric features (using existing machine learning techniques) and to evaluate and propose efficient database search techniques based thereupon.



**Tasks**

- (For BSc thesis) Implementation of a framework and/or GUI for machine learning based extraction of soft biometric features
- (For MSc thesis, additionally) Evaluation of existing and development of new search techniques based on soft biometric features

**Requirements**

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

**By Date**

By now / by appointment

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