

---

## – Master-/Bachelor Thesis –

### Deep Learning-based Face Image Quality Assessment

---

#### da/sec



da/sec is the biometrics and 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. C. Busch and Prof. C. Rathgeb. The focus of the group is on highly innovative and applied IT security research in the special fields of biometrics. Read more on [www.dasec.h-da.de](http://www.dasec.h-da.de).

#### Motivation & Goal

Deep learning-based methods have shown to obtain competitive performance for assessing the quality of facial image, i.e. their utility for biometric recognition. In the recent past, numerous approaches have been proposed and made publicly available. However, a comprehensive survey and benchmark of published methods is missing.

#### Tasks

- Survey on latest deep learning-based methods for face image quality assessment.
- Benchmark of methods for face image quality assessment using standardized metrics.
- Discussion and interpretation of experimental results.

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

#### By Date

By now / by appointment

#### Contact

**Prof. Dr. Christian Rathgeb**  
Christian.rathgeb@h-da.de

h\_da  
Faculty of  
Computer Science  
ATHENE – National Research Center for Applied Cybersecurity  
da/sec – biometrics and security research group  
Schöfferstraße 10  
64295 Darmstadt

