

## – Master-/Bachelor Thesis – Efficient Quality Assessment for Expression Neutrality

### 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. Read more on [www.dasec.h-da.de](http://www.dasec.h-da.de).

### Motivation & Goal

Assessing the quality of face images before using them for recognition is crucial to maintain high recognition accuracies. It has been shown that facial images with extreme expressions significantly affect the biometric performance. The goal of this project is to develop an **efficient** approach to measure the deviation from expression neutrality by using deep neural networks.

### Tasks

- Implementation of a **lightweight** neural network to estimate the deviation from facial expression neutrality.
- Evaluate your quality measures and benchmark them to alternative approaches.

### 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

- Interest in biometric systems and computer vision.
- Analytical and programming skills.

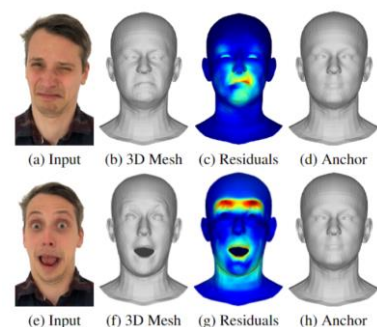
### By Date

By now / by appointment

### Contact

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