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## – Master-/Bachelor Thesis –

### Face Image Expression Quality Assessment

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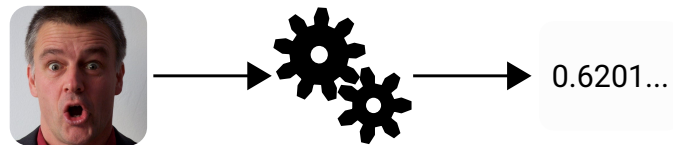
da/sec



da/sec is the biometrics and internet security research group and is affiliated with University of Applied Sciences Darmstadt and the 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, internet security and digital forensics. Read more on [www.dasec.h-da.de](http://www.dasec.h-da.de).

#### Motivation & Goal

The performance of facial biometric systems, such as face recognition in particular, can be limited by the quality of the used images. Facial expressions are one factor that can impact the face image "quality" in this context, and a neutral expression is usually preferred for face recognition purposes. Expression classification models exist, but how to best derive a scalar quality score from the expression?



Face image

Expression  
quality assessment

Quality score

#### Tasks

- Repurpose existing models that classify different facial expressions to assess the image quality for face recognition.
- Alternatively, train a new expression quality assessment model.
- Evaluate the performance of the new quality assessment approach against existing face image quality assessment methods.

#### Start / Period

By now / by appointment

#### Contact

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