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## – Master-/Bachelor Thesis – GAN-generated Face Image Detection

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

### Motivation & Goal

GANs have shown impressive results for the generation of synthetic images including faces. Such facial images can be used to spread misinformation and as such it is of interest to detect images that have been generated by a deep learning-based model. Previous works, have shown promising results for detecting GAN-generated images, however, these detectors often struggle to adapt to situations not seen in the training phase such as different post-processing or images generated by unknown models. The goal of this project is to develop a novel method for detecting GAN-generated images and compare it to different state-of-the-art models.

### Tasks

- Implementation of novel method for detection GAN-generated face images
- Evaluate the detection performance of your detection method and compare to methods from the literature

### We offer

- Incentives for the student to work on this project (work within scientific context and in close collaboration with researchers)

### Requirements

- Interest in biometric systems and computer vision
- High motivation and creativity
- Analytical and programming skills

### By Date

By now / by appointment

### Contact

**M.Sc. Mathias Ibsen**  
[mathias.ibsen@h-da.de](mailto:mathias.ibsen@h-da.de)

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Faculty of Computer Science

ATHENE – National Research Center for Applied Cybersecurity

da/sec – Biometrics and Internet Security Research Group

Schöfferstraße 8b,

64295 Darmstadt

