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HOCHSCHULE DARMSTADT UNIVERSITY OF APPLIED SCIENCES

**fbi** FACULTY OF COMPUTER SCIENCE



# Master-/Bachelor Thesis – Improving the Fairness of Biometric Recognition Systems

## 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. 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 <a href="https://dasec.h-da.de">https://dasec.h-da.de</a>.

## Motivation & Goal

Face recognition systems have frequently been labelled as "biased", "racist", "sexist", "unfair" by numerous media outlets, organisations, and researchers. Since this is an emerging challenge, further research in this area is required to enable the same treatment across different demographical groups.

The goal of this thesis is to fuse different approaches and evaluate whether a fusion grants more fairness than single approaches.

#### **Tasks**

- Use publicly available implementations
- Try different fusions of those
- Analyse and report the fairness of these approaches

## Requirements

- High motivation and creativity
- Strong interest in current research
- Willingness to communicate
- Programming experience

By Date

By now / by appointment

Contact

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