

– Master-/Bachelor Thesis –
AI Act Compliant Explainable Biometric Systems

da/sec



da/sec is the *biometrics* and security research group and is affiliated with Hochschule Darmstadt and the National Research Center for Applied Cybersecurity (ATHENE). The group is led by Prof. Dr. Christoph Busch and Prof. Dr. Christian Rathgeb. The focus of the group is on highly innovative and applied security research in the special fields of biometrics. Read more on www.dasec.h-da.de.

Motivation & Goal

As the AI Act comes into force (2025-2027) in the European Union, it is relevant to study whether Explainable Systems, such as large language models, understand and comply with the guidelines. Biometric systems belong to high-risk systems as they handle sensitive data and automate tasks that impact people's lives. This project seeks to analyse reasoning and propose mitigation techniques against unfair social profiling.

Tasks

- Analyse and understand the EU AI Act regulations regarding biometric systems.
- Implement a face recognition explainable system for different demographics and analyse its behaviour.
- Propose mitigation techniques to ensure compliance with the regulations.
- Work on solving current scientific problems.
- International colleagues and collaboration.
- High motivation and creativity.
- Familiarity with computer vision algorithms.
- Self organized and good communication.

We offer

Requirements

By Date

By now / by appointment

Contact

Ana Real
ana.estrada-real@h-da.de

h_da
PhD Candidate
Computer Science

