

– Master-/Bachelor Thesis – Digital Face Manipulation Detection

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.

Motivation & Goal

Facial images can be edited digitally using software tools such as photoshop or even automatically by, e.g. deep learning-based algorithms. It has been shown that some manipulations can be used to spread misinformation and circumvent the security of face recognition systems. The goal of this project is to develop a novel algorithm for detecting manipulated images by using machine learning methods or image forensics methods.

Tasks

- Implementation of a novel method for detection of digitally manipulated 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
- Analytical and programming skills

By Date

By now / by appointment

Contact

Mathias Ibsen
mathias.ibsen@h-da.de

h_da
 Faculty of Computer Science
 ATHENE – National Research Center for Applied Cybersecurity
 da/sec – Biometrics and Internet Security Research Group
 Schöfferstraße 8b,
 64295 Darmstadt

