h_da
HOCHSCHULE DARMSTADT
UNIVERSITY OF APPLIED SCIENCES
fbi
FACULTY OF COMPUTER SCIENCE

ATHENE
Nationales Forschungszentrum
für angewandte Cybersicherheit

– Master-/Bachelor Thesis –
Training Humans for Fake Identity 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. C. Busch and Prof. C. Rathgeb. 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

AI-tools can be used to generate fake face images and profiles (even by unskilled users) which may cause severe security issues in identity management. Compared to automated detection systems, humans may have different decision criteria to identify such manipulated images. The goal of this project is to analyze the performance of humans for the task of face image manipulation detection before and after training them by giving them specific tips/hints for detecting AI-generated face images.

Tasks

- Create AI fake face detection challenge for humans.
- Collect list of hints to detect AI-generated faces.
- Evaluation of human performance for detecting AI-generated face images before and after training them with specific hints.

We offer

- Incentives for the student to work on this project (work within scientific context, international collaboration, work on project in collaboration with companies)

Requirements

- High motivation and creativity
- Programming skills
- Good analytical skills
- Interest in biometric recognition

By Date

By now / by appointment

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