

– Master-/Bachelor Thesis – Optimized Deep Features for Biometric Template Protection

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 and internet security. Read more on www.dasec.h-da.de.

Motivation & Goal

The General Data Protection Regulation (GDPR) considers biometric data to be a category of sensitive personal information, thus necessitating its protection. However, the implementation of Template Protection (TP) schemes can introduce substantial overhead. The quantisation of real-valued biometric features facilitates the adoption of more efficient schemes while maintaining accuracy.

Tasks

- Modify pre-trained biometric recognition models to produce quantized templates
- Benchmark biometric accuracy of your approach
- Compare with post-hoc binarization schemes

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

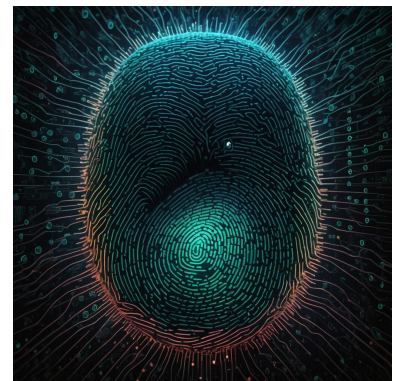
- High motivation and creativity
- Analytical and programming skills
- Strong interest in research

By Date

By now / by appointment

Contact

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