
– Master-/Bachelor Thesis – Ageing Effects in Fingerprint Recognition

da/sec



da/sec is the biometrics and Internet security research group and is affiliated with University of Applied Sciences Darmstadt and the Center for Research in Security and Privacy (CRISP). 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 www.dasec.h-da.de.

Motivation & Goal

Fingerprints represent dynamic biological systems and, thus, are potentially affected by ageing. Age alterations of biometric features cause a degradation of accuracy of the overall system. Fingerprint recognition systems represent mature technologies, which have been deeply investigated in past decades. Performance drops in fingerprint recognition systems have been reported by diverse researchers. However, the vast majority of published results are obtained by rather trivial experimental protocols. More sophisticated evaluations are expected to provide deeper insights to fingerprint ageing effects.

Tasks

- Evaluation of ageing effects in a fingerprint ageing database using state-of-the-art fingerprint recognition software.
- Design of specific evaluation protocols and interpretation of obtained results.

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
- Good programming skills
- Interest in biometric recognition

By Date

By now / by appointment

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