

## – Master/Bachelor Thesis or Student Job – Information Fusion in Vascular Biometric Systems

### 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](http://www.dasec.h-da.de).

### iCOGNIZE GmbH



iCOGNIZE GmbH (Ltd.) settled in Dietzenbach, Germany is setting its primary focus on biometric access-control systems. With our extensive experience in digital image processing, video processing, biometrics, embedded and pervasive computing, FPGA design and connectivity we also develop contract developments for customers on platform independent architecture. iCOGNIZE GmbH offers various services for biometric 3D face recognition and / or palm vein recognition. Along with those services, iCOGNIZE GmbH also offers experienced consulting, design, research and development, both in hardware and software.

### Motivation & Goal

Accuracy, especially in terms of false positive occurrences, is one of the key challenges in large-scale biometric deployments, where an exhaustive database search is performed in the identification and de-duplication scenarios. Fusing information from multiple samples can be used to increase the accuracy of such systems. In this project, various strategies for biometric information fusion will be implemented and evaluated; furthermore, the trade-offs between biometric performance and computational workload will be investigated.

### Tasks

- Independent research in the area of vascular-biometric systems
- Implementation and evaluation of biometric fusion methods

### Requirements

- High motivation and creativity
- Strong interest in research
- Good programming skills
- Good analytical skills

### By Date

By now / by appointment

### Contact

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