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Master-/Bachelor Thesis – Generative Tattoo Recognition

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 <u>www.dasec.h-da.de</u>.

Motivation & Goal

Generative AI-tools can be used to generate art including tattoos. More and more people have tattoos that have been generated by AItools. Therefore, such tattoos can be employed to recognize individuals. The goal of this project is to create a synthetic database of subjects with AI-generated tattoos that can be used to train detection and recognition algorithms.

Tasks	 Research on AI-tools that are suitable for tattoo generation. Generation of AI-generated tattoo database suitable for detection and recognition algorithm. Training and evaluation of existing detection and recognition methods.
We offer	 Incentives for the student to work on this project (work within sci- entific context, international collaboration, work on project in col- laboration 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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