Dr. Daniel Eckhoff

Personal Information

Born 30 June 1993 in Leer, Germany

Skills

Languages Java, Python, Lisp, C, C#, C++, Objective C, Swift, Assembler, PHP, JavaScript

OS macOS, iOS, Windows, Linux, Android

Databases SQL (MySQL, Oracle)

Data Matlab, R, Python (SciKit, Numpy), Machine Science Learning (Keras, Tensorflow, Scikit Learn)

Other Augmented and Virtual Reality, Computer Vision, Computational Neuroscience, Medical Imaging, Image Processing, Embedded Systems, Matlab

Education

2018–2023 **Ph.D**, City University of Hong Kong, Hong Kong SAR. Until June 2019: Nara Institute of Science and Technology, Japan.

Thesis: "What the Study of the Burning Hand Illusion Reveals about the Cognitive and Perceptual Effects of Augmented Reality"

Supervisors: Prof. Alvaro Cassinelli, Prof. Jan Schnupp

Collaborators: Prof. Sir Colin Blakemore, Prof. Gladys Cheing, Prof. Julian Lai

2015–2018 Master of Science in Computer Science, Carl von Ossietzky University of Oldenburg, Oldenburg, Germany.

Thesis: "TutAR - Semi-Automatic Generation of Augmented Reality Tutorials for Medical Education" **Supervisors**: Prof. Dr.-Ing Andreas Hein, Prof. Dr. Christian Sandor

2012–2016 **Bachelor of Science in Computer Science**, *Carl von Ossietzky University of Oldenburg*, Oldenburg, Germany.

Thesis: "Trajectory Calculation of Puncture Needles in Computed Tomography Image Data" **Supervisors**: Prof. Dr.-Ing Andreas Hein, Dr. Melvin Isken

Experience

2014–2016 **Teaching Assistant**, *University of Oldenburg*, Theoretical Computer Science, Computer Networks.

2015–2018 **Research Student**, *Nara Institute of Science and Technology*, Nara, Japan.

2018–2019 **Computer Graphics Engineer**, Centre for Applied Computing and Interactive Media, Hong Kong.

Scholarships and Awards

2017 FIT - Internationale Forschungsaufenthalte in der Informationstechnologie für Masterstudierende (FIT weltweit) from DAAD for a research stay at Nara Institute of Science and Technology in Japan.

2018 Best Short Paper Award at ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry

2018-2019 Japanese Government (MEXT) Scholarship International Students by University Recommendation.

2019-2023 Hong Kong PhD Fellowship Scheme (HKPFS)

2020-2023 HKPFS Academic Excellence Award

Selected Publications

Journal

Björn Friedrich, Lena Elgert, **Daniel Eckhoff**, Jürgen M. Bauer, Andreas Hein. Ensemble Classifiers for Mobility Prediction of Older Adults on Motion Sensor Data in Domestic Environments. In *Nature Scientific Reports*. 2023

Daniel Eckhoff, Christian Sandor, Gladys L. Y. Cheing, Jan Schnupp, and Alvaro Cassinelli. Thermal Pain and Detection Threshold Modulation in Augmented Reality. In *Frontiers in Virtual Reality*. 2022

Conference Paper

Daniel Eckhoff, Royce Ng, Alvaro Cassinelli. Virtual Reality Therapy for the Psychological Well-being of Palliative Care Patients in Hong Kong. In *Adjunct Proceedings of the IEEE International Symposium for Mixed and Augmented Reality*. 2022

Daniel Eckhoff, Christian Sandor, Denis Kalkofen, Ulrich Eck, Christian Lins, and Andreas Hein. Tutar: augmented reality tutorials for hands-only procedures In *Proceedings of the ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry* . 2018. **Best Short Paper Award**

Languages

German Native speaker.

English Strong command.

Japanese Conversational level.