FELIX DOLLACK

PhD candidate

📱 +81 (070) 2680 3459

🌐 felixdollack.github.io

✉ dollack@ai.iit.tsukuba.ac.jp
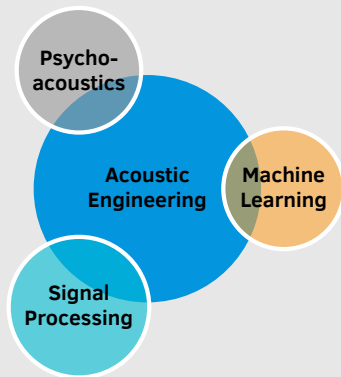
in /in/felix-dollack

○ felixdollack

Technical Skills

Overview

Programming

$0\ LOC \longrightarrow 5000\ LOC$

C • Matlab • LaTeX

C++ • Python • Android

C# • Bash

Education

MSc., Hearing Technology and Audiology (GPA: 3.0)
Specialization: Psychoacoustics
University of Oldenburg
2015 - 2017 | Oldenburg, Germany

B.Eng., Hearing Technology and Audiology (GPA: 3.0)
Jade University of Applied Sciences
2009 - 2013 | Oldenburg, Germany

Experience

Dec 2015 - Mar 2017 — **Software Engineer** — Fraunhofer IIS
- Primarily worked on the implementation of AAC bluetooth in Android using C++
- Customer support for implementing audio coding algorithms
- Exploiting and fixing code vulnerabilities using american fuzzy loop

Aug 2014 - Oct 2014 — **Internship student** — Bertrandt
- Primarily developed a plugin to simulate the effect of car muffler designs using Matlab
- Built a car muffler
- Setup a muffler test booth
- Acoustics and vibration measurement in cars

Research

2017 - today — **PhD Candidate** — University of Tsukuba
Topic: Auditory Mirroring: Amplifying And Reflecting Acoustic Communication In Different Perceptual Domains
- Implement algorithms to extract paralinguistic features from voice
- Create biofeedback device for amplifying and reflecting acoustic communication
- Verify the effects of the device on shaping vocal behaviour
Tools: C++, Matlab, Python, tensorflow

2013 - 2015 — **MSc. Candidate** — University of Oldenburg
Thesis: Investigation on the human performance at identifying facing angle with respect to acoustic externalization and presentation of different complex visual stimuli
- Created VR environments to perform psychoacoustic experiments
- Performed distance perception experiment to verify externalization
- Performed experiment to identify the just noticable difference in facing angle
Tools: Matlab, Unity, Oculus Rift

2009 - 2013 — **BSc. Candidate** — Jade University of Applied Sciences
Thesis: The influence of the site of installation of a circular microphone array on acoustic source localization
- Built circular microphone arrays
- Implemented and compared source localization algorithms (global coherence field, doppler, multiple signal classification)
- Evaluated the influence of site of installation
Tools: Matlab

Publications

F. Dollack, C. Imbery and J. Bitzer, "On the Analysis of Acoustic Distance Perception in a Head Mounted Display", in 2017 International Conference on Artificial Reality and Telexistence and Eurographics Symposium on Virtual Environments (ICAT-EGVE), ICAT-EGVE, 2017.

F. Dollack, C. Imbery, S. van de Par and J. Bitzer, "Einfluss von visueller Stimulation auf Distanzwahrnehmung und Externalisierung", in DAGA 2016, DAGA, 2016.

M. Hansen, F. Dollack, S. Raufer, Hannah-Lina Grahlmann and G. Eberlei, "Speech intelligibility in realistic listening situations for different numbers, azimuths and movement of speech or noise maskers", in Proceedings of the AIA-DAGA 2013, including the 40th Italian (AIA) Annual Conference on Acoustics, AIA-DAGA, 2013.