Simon Zimmermann
Curriculum Vitae

PERSONAL DETAILS

Birth	June 5, 1993
Location	Düsseldorf, Germany
Mail	mail@simonzimmermann.com
Github	github.com/SimonZimmer

EDUCATION

MSc. Media Informatics   2018-2020
University Of Applied Sciences Düsseldorf

Thesis title: 'Scalable Modelling of Room Acoustic Characteristics for AR-devices on the Basis of Visual Information Using Deep Learning' - honors degree

MSc. Music Informatics   2018
University Of Music Karlsruhe

Guest Semester

BEng. Media Engineering   2012-2017
University Of Applied Sciences Düsseldorf

Thesis title: 'A concept for implementing room acoustic material properties in the context of a 3D-audio engine'

WORK EXPERIENCE

C++ Software Engineer   2020-present
Dear Reality GmbH, Full-time
> Full stack development of multiple realtime audio applications. Process follows the guidelines of the test-driven development philosophy, modern C++ and scrum.

Researcher / QA Engineer (working student)   2017-2020
Dear Reality GmbH, Part-time
> Research and development of audio-DSP related prototypes, quality assurance and test automation development.

Room-Acoustics Engineer (working student)   2016-2017
ISRW-Klapdor Part-time
> Room acoustic simulation and measurement.

PROJECTS

dearVR Exoverb   2022
Backend Developer
> Contributed to to the Development of the DAW-plugin "Exoverb". The plugin uses synthesized Reverb Impulse Responses and additional processing to generate a convincing reverb effect

Team Split Facilitation   2022
Backend Developer, DevOps Engineer
> Contributed to transitioning from a one-team solution to a frontend/backend split into two teams using conan, Microsoft Azure, pure-data and C as the extended technology stack

dearVR MIX/MONITOR   2021
Full Stack Developer
> Contributed to the Development of the two DAW-plugins "dearVR MIX" and "dearVR MONITOR". The plugins utilize Headphone Calibration, Room Simulation and Binauralization to virtualize a professional studio environment using only headphones. Plugins are also capable of simulating multichannel-audio playback

PUBLICATION

Co-Author   2021
Conference Paper, Immersive and 3D Audio: from Architecture to Automotive (I3DA): "Machine Learning-Based Room Classification for Selecting Binaural Room Impulse Responses in Augmented Reality Applications"

AWARDS

Composer, Producer   2020

Best contribution "!content" in the category Acoustic Stories, "Sound Cinema Düsseldorf"

Composer, Producer   2020

Audience award for contribution "!content", "Sound Cinema Düsseldorf"

SKILLS

Languages	German (mother tongue)
	English (fluent)
Technologies	C++17
	CMake
	conan
	googletest/googlemock
	google-benchmark
	C99
	Python
	Pure Data (Pd)
	git
	nvim/vim
	docker
	conan
	Azure DevOps
	Jenkins
	POSIX
	MATLAB
	LaTeX
	JUCE
	pybind11
	flask
	wagtail
Other	Music Production
	Modular Synthesizer
	Esoteric Programming Lanuages (Orca, TidalCylces)