



Simon Zimmermann

Software Developer

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

WORK EXPERIENCE

C++ Backend Software Developer

2022-present

Dear Reality GmbH, Full-time

Backend research and development of DSP-algorithms and API design using C, C++ and Python

C++ Fullstack Software Developer

2020-present

Dear Reality GmbH, Full-time

Full-stack development of real-time audio applications following test-driven development, modern C++ and agile project management principles

Researcher/QA Engineer (Working Student)

2017-2020

Dear Reality GmbH, Part-time

Research and development of DSP prototypes, quality assurance, and test automation development

Room-Acoustics Engineer (Working Student)

2016-2017

ISRW-Klapdor, Part-time

Simulation of room-acoustic properties and in-situ acoustic measurements

PROJECTS

dearVR Exoverb

2022

Backend Developer

Developed the DAW-plugin "Exoverb," which uses synthesized reverb impulse responses and additional processing to generate realistic reverberation effects

Team Split Facilitation

2022

Backend Developer, DevOps Engineer

Facilitated the transition from a single-team solution to a frontend/backend split. Extended the technology stack with Conan, Microsoft Azure, Pure Data, and C

dearVR MIX/MONITOR

2021

Full Stack Developer

Developed the multichannel DAW-plugins "dearVR MIX" and "dearVR MONITOR," which utilize headphone calibration, room simulation and binauralization to virtualize studio environments

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"

EDUCATION

M.Sc. 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

M.Sc. Music Informatics

2018

University of Music Karlsruhe

Guest Semester

B.Eng. Media Engineering

2012-2017

University of Applied Sciences Düsseldorf

Thesis title: 'A Concept for Implementing Room Acoustic Properties in the Context of a 3D-Audio Engine'

SKILLS

Languages

German (native), English (fluent)

Technologies

C++17, C99, boost, CMake, conan, Python, googletest/googlemock, google benchmark, Pure Data (Pd), Azure DevOps, Github Actions, Jenkins, git, docker, JUCE, pybind11, flask, wagtail, MATLAB, L^AT_EX, Linux, nvim/vim

Other

Music Production, Modular Synthesizer, Esoteric Programming Languages (Orca, TidalCycles)