

Maximilian Fuchs MSc.

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Professional Experience

Senior Software Engineer

Software Engineer, employee at *3M Health Information Systems*

From August 2022

June 2020 - August 2022

Germany, Remote

- Developed and maintained a medical natural language understanding platform in Java and XML
- Implemented MLOps workflows in AWS, including building, training, and deploying large models
- Collaborated with cross-functional teams to understand business requirements and translate them into technical solutions
- Mentored junior team members and provided technical guidance to help them succeed in their roles
- Acquired and prepared large medical datasets for use in training and evaluating deep learning models

Research Assistant, working student at *DE-CIX*

March 2018 – May 2020

Frankfurt, Germany

- Implemented and tested SDN components for production in Python and C
- Wrote technical specification for federal cloud project “Gaia X”
- Performed Data Science tasks for research papers and business intelligence (SDN, System Engineering, Internet Infrastructure)

Research Assistant, working student at TU Darmstadt, UKP Lab

October 2017 – February 2018

Darmstadt, Germany

- Developed a Deep Learning NLP Web Service in Python and Java
- Assisted in the course “NLP for the Web”, focused on using NLP algorithms, components and methods for developing Web applications (Java, Python)

Research Assistant, working student at Telecooperation Lab, TU Darmstadt

February 2015 – March 2017

Darmstadt, Germany

- Developed a microservice based video-streaming application
- Set up virtual network and computing infrastructure
- Developed schedulers for container orchestration and compared performance (Docker Swarm)
- Implemented and designed GUI elements for Microsoft Pixelsense

Software development intern, part-time at sofasession GmbH

February 2015 – June 2015

Vienna, Austria

- Implemented signal processing components in C++
- Tested and debugged software components for a real-time audio processing system

Education

Master of Science - Internet- and Web-based Systems

July 2020

Technische Universität Darmstadt (Thesis: Rnd of a cloud video object tracker [Vue.js, Docker, RabbitMQ, OpenCV])

Bachelor of Science - Network Engineering

March 2016

University of Applied Sciences Carinthia, Austria (Thesis: Rnd of a Shopfront-Editor [backbonejs])

Skills

Responsive Web-Apps (Typescript, React, Vue, Svelte, Electron, WebRTC, WebGL)

Distributed Web-Services (Node.js, NestJS, Python, AMQP, CQRS, Redis, SQL/NoSQL, data warehouse)

API Design (*REST, GraphQL, openAPI, oAuth2*)

Testing (*Jest, Puppeteer, device farms*)

Deployment (*GCP, AWS, Docker/Kubernetes, CI/CD, serverless, edge computing*)

Misc (*cli-apps, data migration, UI/UX design, mentoring*)

Advocate of: Functional/reactive programming, QA/test-automation, microservice architecture,
event sourcing, small + frequent releases