Maximilian Fuchs MSc.

maxfuchs.net • maxfuchs@pm.me

Professional Experience

Senior Software Engineer

Software Engineer, employee at 3M Health Information Systems

From August 2022

June 2020 - August 2022

• Developed and maintained a medical NLU platform in Java and XML

Germany, Remote

- Implemented MLOps workflows in AWS, including building, training, and deploying large models
- Translated business requirements into technical solutions in cross-functional collaborations
- 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 (Java, Python, AWS, NLP, Computer-assisted coding, Physician documentation improvement, scrum)

Research Assistant, working student at DE-CIX

March 2018 - May 2020

• Implemented and tested SDN components for production in Python and C

Frankfurt, Germany

• Wrote technical specification for federal cloud project "Gaia X" (SDN, System Engineering, Internet Infrastructure, Unix/Linux, Kibana, Elastic, Kafka)

Research Assistant, working student at UKP Lab, TU Darmstadt

October 2017 - February 2018

• Deployed machine learning models in a production environment

Darmstadt, Germany

 Tutored NLP programming classes for graduate students (Java, Python, Java Spring)

Research Assistant, working student at Telecooperation Lab, TU Darmstadt

February 2015 - March 2017

• Developed a microservice based video-streaming application

Darmstadt, Germany

- Developed and compared performance of schedulers for container orchestration using docker swarm and go
- Implemented and designed GUI elements for Microsoft Pixelsense (C#, Docker, Vagrant, Go, Docker Swarm, Bash)

Software development intern, part-time at sofasession GmbH

February 2015 - June 2015

• Implemented signal processing components in C++

Vienna, Austria

• Tested and debugged software components for a real-time audio processing system (C++, Git, JavaScript, HTML/CSS)

Education

Master of Science - Internet- and Web-based Systems

July 2020

Technische Universität Darmstadt (Thesis: A data-driven approach for Route Selection at Internet Exchange Points)

Bachelor of Science - Network Engineering

March 2016

University of Applied Sciences Carinthia, Austria (Thesis: Comparison of Dynamic Range Compressors for Normalization of Audio Signals)

Skills

Network monitoring, SDN, Network management) Natural Language Processing (NLTK, UIMA, DKPro, Information extraction)

Data Science (Pandas, Jupyter, data visualization, data cleaning, deep learning, RapidMiner)

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

Misc (cli-apps, requirements engineering, mentoring, web-scraping)

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