# Michael Lohr

#### Curriculum Vitae

# Skills

#### **Key Skills**

- Software Development • Game Development
- Solutions Architecture
- · Problem-solving
- Project Management
- Collaboration



**Address** Lessingstraße 5 80336 Munich Germany

### **Contact**

(+49) 176 85706626

michael@lohr-ffb.de

michidk (7)

**Networks** michael-lohr in

## **Technical Skills**

- · Programming Languages: C#, Java, JavaScript, Python, Rust
- · Web Frameworks: ASP.NET Core, Play Framework, Vue.js, Flask
- Web Technologies: REST, Websockets, HTML, (S)CSS, Apache2, Nginx
- Databases: MySQL, MSSQL, MongoDB, Redis, PostgreSQL, InfluxDB
- Cloud technologies: Docker, Kubernetes, Amazon Web Services
- Game Development: Unity3D, Godot, OpenTK, Three.js
- Operating Systems: Microsoft Windows, Debian, Ubuntu, Manjaro

# Work Experience

STABL Energy GmbH

Okt 2022 — Present JUNIOR CLOUD ARCHITECT Munich

STABL Energy develops smart, safe, reliable, and cost-effective battery storage systems.

- Designing and implementing a Cloud-based system to ingest and analyze large amounts of near-realtime data
  - Developing a platform to remotely control battery storage system deployments
  - Overseeing the development of cloud-connected edge devices
  - Managing enterprise software and network solutions for the different departments

#### STABL Energy GmbH

Jan 2022 — Sep 2022

Munich

CLOUD ARCHITECT, WORKING STUDENT

- Planned a fault-tolerant and scalable monitoring/logging architecture based on the AWS Cloud
- Developed software to connect microcontrollers to the Cloud in a secure way

Aug 2021 - Dec 2021 Filics GmhH

PROJECT STUDY: FAULT-TOLERANT CLOUD-BASED MONITORING ARCHITECTURES FOR ROBOTICS

Garching

Filics is a robotic high-tech start-up that builds automated guided vehicles to handle the intralogistical material flow

- Developed a logging/monitoring architecture to monitor the robot fleets
- Developed integrations for the Robot Operating System (ROS)

#### Lohr, Jöstingmeier & Partner

DATA PROTECTION OFFICER

Jun 2018 — Present

Puchheim

Lohr, Jöstingmeier & Partner is a German law firm specializing in German and European intellectual property matters. I am overseeing the personal data protection strategy and ensure compliance with data protection laws.

Lohr IT Dec 2015 — Present OWNER Eichenau

Lohr IT is developing software and web experiences.

- Building teams and managing software projects
- Developing web applications and container-based backend software

#### **Amazon Web Services EMEA SARL**

Oct 2020 — Feb 2021

Munich

SOLUTIONS ARCHITECT INTERN

Amazon Web Services offers reliable and scalable cloud computing services.

- Worked on different workshops covering topics like Machine Learning and Big Data in the SaaS context
- Directly consulted ISVs about AWS's cloud offerings and proposed architectures
- Built proof of concepts of Cloud architectures using the AWS offering for customers

#### TÜV SÜD Sec-IT GmbH

SOFTWARE DEVELOPER, WORKING STUDENT

Dec 2018 — Feb 2020

Munich The Cyber Security department of TÜV SÜD creates pragmatic solutions to ensure security on various systems.

- · Planned and designed the architecture of a distributed system for the automated detection of security vulnerabilities
- Deployed software on a Docker/Kubernetes-based platform in the Microsoft Azure Cloud
- Lead the development of a Microsoft ASP.NET Core-based backend
- Developed microservices to handle large-scale Email traffic and modules to detect security flaws in IT systems

**Broken Vector UG** FOUNDER & MANAGING DIRECTOR Jan 2017 — Jul 2020

Eichenau

Broken Vector developed and sold (Virtual Reality (VR)) software as well as 3D models on various online stores.

- Managed a team of three software developers and four artists
- Developed a voxel-based VR design software that was published on the Steam and Oculus store
- Managed and developed new product ideas, prototypes, and final software products
- Managed business and customer relations

#### **Technical University Munich**

Oct 2016 — Apr 2017 Garching

STUDENT TUTOR

As a tutor of the course "Fundamentals of programming", I taught students object-orientated programming in Java.

- Prepared and held lectures about programming to ~25 students
- Corrected exercises and exams

#### Klinikum rechts der Isar der TU München

Jul 2013 — Aug 2013

**INTERNSHIP** 

During the internship at the cancer research of "Klinik und Poliklinik für Innere Medizin II", I mixed chemical compounds and prepared extracted organs for microscopic inspection.

#### MIPM Mammendorfer Institut für Physik und Medizin GmbH

Jul 2012 — Jun 2012

INTERNSHIP

Mammendorf

MIPM develops medical monitoring systems that are magnetic resonance imaging (MRI) compatible. I worked in the assembly and soldered circuit boards, produced electronic plugs, and prepared casings.

#### **Education**

#### **Technical University Munich**

2019 - 2022

MASTER OF SCIENCE (M.SC.), INFORMATICS

Garching

The Department of Informatics at TUM is one of the largest and most renowned computer science departments in Germany, and the professors and teaching staff are experts in their respective fields. Students of the master's programs receive a top-level education and can tailor their program to focus in-depth on the topics that interest them most.

- Focused on Internet of Things and Cloud Computing
- In my master's thesis, I presented a novel generic cloud architecture format and transpiler software to deploy to different cloud platforms without platform-specific knowledge (graded 1.0/A+)

#### **Technical University Munich**

2015 - 2019

BACHELOR OF SCIENCE (B.SC.), INFORMATICS: GAMES ENGINEERING

Garching

The "Informatics: Games Engineering" bachelor's degree at TUM is a technically-oriented program for students interested in game development. Games production is a booming industry that is set to grow rapidly in the near future. This new technology is utilized in many industries, including engineering, construction, medicine, and education.

- Focused on Virtual Reality and Machine Learning in the field of Human-computer interaction (HCI)
- Wrote my bachelor's thesis about using smartphones to interact with Virtual Reality (graded 1.0/A+)

#### **Obermenzinger Gymnasium**

2007 - 2015

ALLGEMEINE HOCHSCHULREIFE (HIGHER EDUCATION ENTRANCE QUALIFICATION)

Munich

The Obermenzinger Gymnasium München is a state-approved economic and social science grammar school.

- I completed various additional computer science-related courses and activities.
- I held a weekly programming tutorial for other pupils.

#### Josef-Dering-Grundschule

**Until 2007** 

Elementary/primary school

#### Certifications **Azure AI Fundamentals** May 2021 MICROSOFT **Azure Fundamentals** Apr 2021 **MICROSOFT AWS Certified Solutions Architect - Professional** Feb 2021 AMAZON WEB SERVICES **AWS Certified Solutions Architect - Associate** Feb 2021 AMAZON WEB SERVICES **AWS Certified Developer - Associate** Nov 2020 AMAZON WEB SERVICES Dec 2020 AWS Certified SysOps Administrator – Associate AMAZON WEB SERVICES DAAD English Language Certificate Level GER C1, UNIcert III, ALTE Level 4 May 2020 TECHNICAL UNIVERSITY MUNICH Google Cloud Platform: Baseline: Data, ML, Al Nov 2019 **GOOGLE Advanced Topics in Procedural Content Generation** Aug 2019 IT UNIVERSITY OF COPENHAGEN **Machine Learning** Jul 2017 STANFORD UNIVERSITY **Fundamentals of Digital Marketing** Oct 2016 **GOOGLE Unity Certified Developer** Aug 2016 **UNITY TECHNOLOGIES** expired Apprenticeship as Multimedia Assistant (VBP) Jul 2013 VERBAND BAYRISCHER PRIVATSCHULEN LCCI English Language Certificate Level 2 for Business and Commerce Jul 2013

# Volunteer Experience

#### Akademischer Gesangverein München e.V.

LONDON CHAMBER OF COMMERCE AND INDUSTRY

2016 - Present

IT AND NETWORK ADMINISTRATOR

Munich

- Developed a local network infrastructure supporting more than 200 concurrent users
- Architectured and developed a Kubernetes-based cluster for web-based infrastructure and applications

#### Akademischer Gesangverein München e.V.

Mar 2017 — Aug 2018

BOARD MEMBER, TREASURER

Munich

- Managed 30.000 Euro of financial assets of the club itself and six musical ensembles
- · Administrated the club together with seven other board members

#### **Personal Interests**

- · Programming, Cloud Technologies, Game Development, Electronics, Drones
- Diving, Skiing, Climbing, Table Tennis, Board Games