# Michael Lohr

## Curriculum Vitae

# Skills

## **Key Skills**

- Software Development
- IoT Engineering
- Leadership

- · Product Management
- · Cloud Architecture
- Collaboration

#### **Technical Skills**

- Programming Languages: TypeScript, Python, Rust, C#, Java, C
- Web Technologies: ASP.Net Core, Vue.js, React/Next.js, Tailwind, Nginx
- Databases: DynamoDB, MongoDB, PostgreSQL, Redis, InfluxDB, Microsoft Dataverse
- · Cloud Technologies: Docker, Kubernetes, Terraform, CDKTF, Amazon Web Services



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#### Web

www.lohr.dev
michael-lohr
michidk

# **Work Experience**

STABL Energy

HEAD OF CLOUD & IT

Munich, Germany

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

- Building, managing and leading the cloud engineering team, driving strategy and execution
- Serving as Product Owner & Product Manager, overseeing product strategy and roadmap
- Assisting the Engineering Director and C-level with financial management and planning
- · Managing and leading the IT department as a strategic and technological sparring partner

STABL Energy
SENIOR CLOUD ARCHITECT
Aug 2023 - Dec 2024
Munich, Germany

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

- Designing and implementing scalable cloud systems for ingesting and analyzing near-real-time data
- Architecting and developing an IoT platform for remote battery storage management
- · Leading development of embedded IoT devices (bare-metal & Linux) using Rust for edge computing

**STABL Energy** 

**CLOUD ARCHITECT** 

Oct 2022 - Jul 2023

Munich, Germany

STABL Energy

CLOUD ENGINEER, WORKING STUDENT

Jan 2022 - Sep 2022

Munich, Germany

- Implemented a fault-tolerant and scalable monitoring/logging architecture using the AWS Cloud
- Developed embedded software to securely connect microcontrollers to the Cloud

Filics Aug 2021 – Dec 2021

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

Garching, Germany

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

- Developed a fault-tolerant and scalable monitoring/logging architecture inside the AWS Cloud
- Researched and evaluated Cloud Computing solutions for robot/IoT appliances
- Implemented integrations for the Robot Operating System (ROS)
- Defined requirements, selected hardware, and installed wireless communication hardware

### **Amazon Web Services (AWS)**

SOLUTIONS ARCHITECT INTERN

Oct 2020 - Feb 2021

Munich, Germany

Amazon Web Services offers reliable and scalable cloud computing services.

- Developed and delivered workshops on Machine Learning and Big Data in SaaS contexts
- · Consulted Independent Software Vendors (ISVs) on AWS cloud offerings and architecture solutions
- Designed and implemented proof-of-concept cloud architectures for customers

Broken Vector UG Jan 2017 - Jul 2020

FOUNDER & MANAGING DIRECTOR

Eichenau, Germany

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

- Managed a team of three software developers and four 3D artists
- Developed a voxel-based VR design software that was published on the Steam and Oculus store
- · Led product ideation and development from concept to market-ready software products
- Managed business and customer relations

**TÜV SÜD Sec-IT** Dec 2018 - Feb 2020

SOFTWARE DEVELOPER, WORKING STUDENT

Munich, Germany

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

- Developed software modules for detecting security vulnerabilities in IT systems
- Designed and architected a distributed system for automated security vulnerability detection
- Deployed software solutions on Docker/Kubernetes platform in Microsoft Azure Cloud
- Led development of a Microsoft ASP.NET Core-based backend
- Developed microservices for large-scale email processing

## Lohr, Jöstingmeier & Partner

Jun 2018 - Present

DATA PROTECTION OFFICER

Pucheim, Germany

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

## **Technical University of Munich**

Oct 2016 - Apr 2017

STUDENT TUTOR

Garching, Germany

As a tutor for 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

Dec 2015 - Present Lohr IT **OWNER** 

Lohr IT is developing desktop software and web experiences.

- Building teams and managing software projects
- Developing web applications, API services and desktop software

# Klinikum rechts der Isar der TU München

Jul 2013 - Jul 2013

Eichenau, Germany

**INTERNSHIP** 

Munich, Germany

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.

# Mammendorfer Institut für Physik und Medizin

Jul 2012 - Jul 2012

INTERNSHIP

Mammendorf, Germany

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 of Munich**

2019 - 2022

MASTER OF SCIENCE (M.SC.), INFORMATICS - SCORE: 1.6

Garching, Germany

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 IaC approach for platform-independent cloud architectures and a transpiler system to deploy to different cloud platforms without platform-specific knowledge (graded 1.0/A+)

## **Technical University of Munich**

2015 - 2019

BACHELOR OF SCIENCE (B.SC.), INFORMATICS: GAMES ENGINEERING - SCORE: 2.4

Garching, Germany

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
- In my bachelor's thesis, I researched and developed new interaction methods between smartphones and Virtual Reality applications (graded 1.0/A+)

## **Obermenzinger Gymnasium**

2007 - 2015

HIGHER EDUCATION ENTRANCE QUALIFICATION, ECONOMIC BRANCH - SCORE: 2.1

Munich, Germany

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

- · Completed various additional computer science-related courses and activities
- Organized and gave a weekly programming course for other students

# Certifications

AWS Certified AI Practitioner AMAZON WEB SERVICES (AWS)	Dec 2024
Microsoft Certified: Azure Al Fundamentals MICROSOFT	May 2021
Microsoft Certified: Azure Fundamentals MICROSOFT	Apr 2021
AWS Certified Solutions Architect - Professional AMAZON WEB SERVICES (AWS)	Feb 2021
AWS Certified SysOps Administrator – Associate AMAZON WEB SERVICES (AWS)	Dec 2020 expired
AWS Certified Developer – Associate AMAZON WEB SERVICES (AWS)	Nov 2020 expired
DAAD English Language Certificate Level GER C1, UNIcert III, ALTE Level 4 TECHNICAL UNIVERSITY MUNICH	May 2020
AWS Certified Solutions Architect – Associate AMAZON WEB SERVICES (AWS)	May 2020
Machine Learning STANFORD UNIVERSITY	Jul 2017
Unity Certified Developer UNITY TECHNOLOGIES	Aug 2016 expired
LCCI English Language Certificate Level 2 for Business and Commerce LONDON CHAMBER OF COMMERCE AND INDUSTRY	Jul 2013
Apprenticeship as Multimedia Assistant (VBP)	Jul 2013

# Volunteering

# Akademischer Gesangverein München e.V.

VERBAND BAYRISCHER PRIVATSCHULEN

Apr 2024 – Present Munich, Germany

HEAD OF IT

• Managing all IT systems used by employees, rental customers, and event guests

 Administering the club's operations with 600+ members, its properties and assets, and eight musical ensembles in cooperation with 14 other board members

#### Akademischer Gesangverein München e.V.

Mar 2017 - Aug 2018

**BOARD MEMBER, TREASURER** 

Munich, Germany

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

#### Akademischer Gesangverein München e.V.

Dec 2016 - Present

IT AND NETWORK ADMINISTRATOR

Munich, Germany

- Developed and implemented a local network infrastructure supporting 200+ concurrent users
- · Designed and deployed a Kubernetes-based cluster for web-based infrastructure and applications

# Personal Interests

- · Contributing to OSS Projects, Writing Technical Blog Posts, Cloud Technologies, Game Development
- Electronics, Building Drones, Home Automation, 3D Printing
- · Technical Diving, Skiing, Climbing, Tennis, Board Games