Michael Lohr

Curriculum Vitae

Address
Lessingstr. 5
80336 Munich
Germany

Contact
📞 (+49) 176 8570 6626
✉ michael@lohr.dev

Web
🌐 www.lohr.dev
🔗 michael-lohr
⌱ michidk

Skills

Key Skills

- Software Development
- Product Management
- IoT Engineering
- Cloud Architecture
- Leadership
- 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

Work Experience

STABL Energy
SENIOR CLOUD ARCHITECT

Aug 2023 – Present
Munich, Germany

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

- Building and leading the cloud engineering team from the ground up, driving strategy and execution
- Designing scalable cloud systems for ingesting and analyzing near-real-time data
- Architecting an IoT platform for remote battery storage management and streamlined deployments
- Leading development of embedded IoT devices (bare-metal & Linux) using Rust for efficient edge computing
- Product Owner & Product Manager, overseeing product strategy, roadmap, and delivery
- Assisting the Engineering Director and C-level with financial management and strategic planning
- Leading the IT department as a strategic and technological sparring partner

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

Aug 2021 – Dec 2021
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 different Cloud Computing solutions for robot/IoT appliances
- Developed 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.

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

Broken Vector UG
FOUNDER & MANAGING DIRECTOR

Jan 2017 – Jul 2020
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
- Developed new product ideas, prototypes, and final software products
- Managed business and customer relations

TÜV SÜD Sec-IT
SOFTWARE DEVELOPER, WORKING STUDENT

Dec 2018 – Feb 2020
Munich, Germany

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

- Developed software modules to detect security flaws in IT 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

Lohr, Jöstingmeier & Partner
DATA PROTECTION OFFICER

Jun 2018 – Present
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
STUDENT TUTOR

Oct 2016 – Apr 2017
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

Lohr IT
OWNER

Dec 2015 – Present
Eichenau, Germany

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
INTERNSHIP

Jul 2013 – Jul 2013
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
INTERNSHIP

Jul 2012 – Jul 2012
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
MASTER OF SCIENCE (M.SC.), INFORMATICS – SCORE: 1.6

2019 – 2022
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 to formulate 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
BACHELOR OF SCIENCE (B.SC.), INFORMATICS: GAMES ENGINEERING – SCORE: 2.4

2015 – 2019
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
- Wrote my bachelor's thesis about using smartphones to interact with Virtual Reality (graded 1.0/A+)

Obermenzinger Gymnasium
HIGHER EDUCATION ENTRANCE QUALIFICATION, ECONOMIC BRANCH – SCORE: 2.1

2007 – 2015
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

Josef-Dering-Grundschule

2007
Eichenau, Germany

Certifications

AWS Certified AI Practitioner
AMAZON WEB SERVICES (AWS)

Dec 2024

Microsoft Certified: Azure AI Fundamentals
MICROSOFT

May 2021

Microsoft Certified: Azure Fundamentals	Apr 2021
MICROSOFT	

AWS Certified Solutions Architect – Professional	Feb 2021
AMAZON WEB SERVICES (AWS)	

AWS Certified SysOps Administrator – Associate	Dec 2020
AMAZON WEB SERVICES (AWS)	*expired*

AWS Certified Developer – Associate	Nov 2020
AMAZON WEB SERVICES (AWS)	*expired*

DAAD English Language Certificate Level GER C1, UNIcert III, ALTE Level 4	May 2020
TECHNICAL UNIVERSITY MUNICH	

AWS Certified Solutions Architect – Associate	May 2020
AMAZON WEB SERVICES (AWS)	

Machine Learning	Jul 2017
STANFORD UNIVERSITY	

Unity Certified Developer	Aug 2016
UNITY TECHNOLOGIES	*expired*

LCCI English Language Certificate Level 2 for Business and Commerce	Jul 2013
LONDON CHAMBER OF COMMERCE AND INDUSTRY	

Apprenticeship as Multimedia Assistant (VBP)	Jul 2013
VERBAND BAYRISCHER PRIVATSCHULEN	

Volunteering

Akademischer Gesangverein München e.V.
HEAD OF IT

Apr 2024 – Present
Munich, Germany

- Responsible for all IT systems, used by multiple employees, rental customers and event guests
- Administer the club with more than 600 members, its properties and assets and its eight musical ensembles together with 14 other board members

Akademischer Gesangverein München e.V.
BOARD MEMBER, TREASURER

Mar 2017 – Aug 2018
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.
IT AND NETWORK ADMINISTRATOR

Dec 2016 – Present
Munich, Germany

- Developed a local network infrastructure for more than 200 concurrent users
- Architectured and developed 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