# Michael Lohr

Curriculum Vitae

**Address**
Lessingstraße 5
80336 Munich
Germany

**Contact**
(+49) 176 85706626 ☎
michael@lohr-ffb.de ✉

**Networks**
michael-lohr in
michidk ⌂

## Skills

### Key Skills

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

### 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**
JUNIOR SOLUTIONS ARCHITECT
Okt 2022 — Present
Munich

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

- Building up and managing the cloud team at STABL
- Designing and implementing a cloud-based system to ingest and analyze large amounts of near-realtime data
- Architecting a platform to control battery storage systems remotely
- Leading the development of FreeRTOS-based IoT devices written in Rust
- Managing enterprise software and network solutions for the different departments

**STABL Energy GmbH**
CLOUD ARCHITECT, WORKING STUDENT
Jan 2022 — Sep 2022
Munich

- Planned and implemented a fault-tolerant and scalable monitoring/logging architecture inside the AWS Cloud
- Developed software to securely connect microcontrollers to the Cloud

**Filics GmbH**
PROJECT STUDY: FAULT-TOLERANT CLOUD-BASED MONITORING ARCHITECTURES FOR ROBOTICS
Aug 2021 — Dec 2021
Garching

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

- Developed a logging/monitoring architecture to monitor the robot fleets
- Developed integrations for the Robot Operating System (ROS)
- Investigated different Cloud Computing solutions for robot/IoT appliances
- Worked out requirements, hardware selection, and installation of wireless communication hardware

**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**
OWNER
Dec 2015 — Present
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
SOLUTIONS ARCHITECT INTERN                                                      Munich
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 customers about AWS's cloud offerings and proposed architectures
- Built proof of concepts of cloud architectures for customers

**TÜV SÜD Sec-IT GmbH**                                               Dec 2018 — Feb 2020
SOFTWARE DEVELOPER, WORKING STUDENT                                             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
- Lead the development of a Microsoft ASP.NET Core-based backend
- Developed microservices to handle large-scale email traffic
- Developed software modules to detect security flaws in IT systems
- Deployed software on a Docker/Kubernetes-based platform in the Microsoft Azure Cloud

**Broken Vector UG**                                                 Jan 2017 — Jul 2020
FOUNDER & MANAGING DIRECTOR                                                  Eichenau
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 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
STUDENT TUTOR                                                                 Garching
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                                                                      Munich
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
Grade: 1.6
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 Munich**
2015 — 2019

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

Grade: 2.4

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

Grade: 2.1

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

**AWS Certified SysOps Administrator – Associate**
Dec 2020

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, AI**
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

LONDON CHAMBER OF COMMERCE AND INDUSTRY

## Volunteer Experience

**Akademischer Gesangverein München e.V.**
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.

BOARD MEMBER, TREASURER

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