# Michael Lohr

Curriculum Vitae

Address Lessingstraße 5 80336 Munich Germany

## Skills

#### **Key Skills**

- Software DevelopmentGame Development
- Solutions Architecture

· Problem-solving

• Project Management

Collaboration

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

#### **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

## Networks

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## **Work Experience**

STABL Energy GmbH SENIOR CLOUD 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

Jan 2022 — Sep 2022

Munich

CLOUD ARCHITECT, WORKING STUDENT

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

Filics GmbH Aug 2021 — Dec 2021

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 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**

SOLUTIONS ARCHITECT INTERN

Oct 2020 — Feb 2021

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

Fishena

FOUNDER & MANAGING DIRECTOR

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

Municl

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

Garching

MASTER OF SCIENCE (M.SC.), INFORMATICS 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**

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

Garching

2015 - 2019

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 MICROSOFT	May 2021
Azure Fundamentals MICROSOFT	Apr 2021
AWS Certified Solutions Architect – Professional AMAZON WEB SERVICES	Jan 2027
AWS Certified Solutions Architect – Associate  AMAZON WEB SERVICES	Jan 2027
AWS Certified Developer – Associate  AMAZON WEB SERVICES	Nov 2020
AWS Certified SysOps Administrator – Associate  AMAZON WEB SERVICES	Dec 2020
DAAD English Language Certificate Level GER C1, UNICERT III, ALTE Level 4 TECHNICAL UNIVERSITY MUNICH	May 2020
Google Cloud Platform: Baseline: Data, ML, AI GOOGLE	Nov 2019
Advanced Topics in Procedural Content Generation IT UNIVERSITY OF COPENHAGEN	Aug 2019
Machine Learning STANFORD UNIVERSITY	Jul 2017
Fundamentals of Digital Marketing GOOGLE	Oct 2016
Unity Certified Developer UNITY TECHNOLOGIES	Aug 2016 expired
Apprenticeship as Multimedia Assistant (VBP) VERBAND BAYRISCHER PRIVATSCHULEN	Jul 2013
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.

BOARD MEMBER, TREASURER

Mar 2017 — Aug 2018 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