

# Michael Lohr

Curriculum Vitae



## 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



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Germany

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### Networks

michael-lohr   
michidk 

## Work Experience

### STABL Energy GmbH

JUNIOR SOFTWARE/SOLUTIONS ARCHITECT, WORKING STUDENT

Jan 2022 — Present  
Munich

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

- Planning a fault-tolerant and scalable monitoring/logging architecture based on the AWS Cloud
- Developing software to connect microcontrollers to the Cloud in a secure way
- Designing a Cloud-based system to ingest and analyze large amounts of near-realtime data

### 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
- Investigated into different Cloud Computing solutions for robot/IoT appliances
- Developed integrations for the Robot Operating System (ROS)
- 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 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

STUDENT TUTOR

Oct 2016 — Apr 2017

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

INTERNSHIP

Jul 2013 — Aug 2013

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

INTERNSHIP

Jul 2012 — Jun 2012

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

MASTER OF SCIENCE (M.SC.), INFORMATICS

2019 — Present

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.

- Focusing on distributed systems and cloud computing.
- Expected completion: 2022

### Technical University Munich

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

2015 — 2019

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 A+)

### Obermenzinger Gymnasium

ALLGEMEINE HOCHSCHULREIFE (HIGHER EDUCATION ENTRANCE QUALIFICATION)

2007 — 2015

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

Elementary/primary school

Until 2007

## Certifications

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

## Volunteer Experience

<b>Akademischer Gesangverein München e.V.</b> IT AND NETWORK ADMINISTRATOR	2016 — Present Munich
<ul style="list-style-type: none"><li>• Developed a local network infrastructure supporting more than 200 concurrent users</li><li>• Architected and developed a Kubernetes-based cluster for web-based infrastructure and applications</li></ul>	
<b>Akademischer Gesangverein München e.V.</b> BOARD MEMBER, TREASURER	Mar 2017 — Aug 2018 Munich
<ul style="list-style-type: none"><li>• Managed 30.000 Euro of financial assets of the club itself and six musical ensembles</li><li>• Administrated the club together with seven other board members</li></ul>	

## Personal Interests

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