# Michael Lohr

Curriculum Vitae

**Address** Zweigstraße 31 82223 Eichenau Germany

# Skills

### **Key Skills**

- Software Development • Game Development
- Solutions Architecture
- Machine Learning
- Project Management

Teamwork

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#### **Technical Skills**

- Programming Languages: C#, Java, JavaScript, Python, Rust
- Web Frameworks: ASP.NET Core, Play Framework, Vue.is, 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 michael-lohr in

Contact

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# Work Experience

STABL Energy GmbH

JUNIOR SOFTWARE/SOLUTIONS ARCHITECT

Munich

Jan 2022 — Current

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

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
- 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 (GD-PR/DSGVO and BDSG).

Lohr IT Dec 2015 — Present OWNER Eichenau

Lohr IT is developing software and web experiences.

- Building teams and managing software projects
- Developing and running web applications and container-based backend software

**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
- 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

#### 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

#### **Technical University Munich**

Oct 2016 — Apr 2017 Garching

STUDENT TUTOR

- Prepared and held lectures about programming to ~25 students
- · Corrected exercises and exams

#### Klinikum rechts der Isar der TU München

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.

As a tutor of the course "Fundamentals of programming", I taught students object-orientated programming in Java.

#### MIPM Mammendorfer Institut für Physik und Medizin GmbH

Jul 2012 — Jun 2012

INTERNSHIP

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 — Present

MASTER OF SCIENCE (M.SC.), INFORMATICS

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**

2015 - 2019

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

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**

2007 - 2015

ALLGEMEINE HOCHSCHULREIFE (HIGHER EDUCATION ENTRANCE QUALIFICATION)

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

**Until 2007** 

Elementary/primary school

### Certifications

**Azure AI Fundamentals** May 2021 MICROSOFT

**Azure Fundamentals** Apr 2021

**AWS Certified Solutions Architect - Professional** 

Feb 2021

AMAZON WEB SERVICES

**MICROSOFT** 

Feb 2021

**AWS Certified Solutions Architect - Associate** 

AMAZON WFB SFRVICES

| 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<br>expired |
| Apprenticeship as Multimedia Assistant (VBP) VERBAND BAYRISCHER PRIVATSCHULEN                               | Jul 2013            |
| LCCI English Language Certificate Level 2 for Business and Commerce LONDON CHAMBER OF COMMERCE AND INDUSTRY | Jul 2013            |

# **Volunteer Experience**

# Akademischer Gesangverein München e.V.

2016 — Present

Munich

IT AND NETWORK ADMINISTRATOR

- 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.

Mar 2017 — Aug 2018

BOARD MEMBER, TREASURER

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