# GUNTHER BIDLINGMAIER 🗷 🗗

Georgenstraße 42, 80799 Munich, Germany mail@bidlingmaier.net 🗗 https://github.com/gbid 🗹

# WORK EXPERIENCE

# Founder of Bewerbungshelfer.net

January 2024 - present

- ▷ Developed a Fullstack Web App for creating and optimizing job applications using Large Language Models.
- ▷ Rust | Axum | PostgreSQL | TypeScript | React.js | Docker

## Software Engineer in CTO Taskforce, Check24 GmbH

September 2023 - January 2024

- ▷ Built a new server infrastructure for the core product of Check24 (Car Insurances).
- ▶ Deployment of a new application on this infrastructure including CI/CD and dynamic creation of logical preview environments for feature branches.
- ▶ Implementation of High Availability for core parts of the infrastructure, including the central MySQL database.
- ▷ Linux | Ansible | CI/CD | Kubernetes | Docker | MySQL

# Researcher at the Chair of Algorithms and Complexity, TU Munich

2021 - 2023

- $\triangleright$  Designed, analyzed  $\square$ , and implemented  $\square$  a greedy algorithm for a fundamental scheduling problem, simplifying understanding and implementation. Reduced running time from  $\mathcal{O}(n^3d^3)$  to  $\mathcal{O}(nd)$ .
- ▶ Taught a Bachelor's course 🗹 on Probability Theory and a Master's course 🖸 on algorithms and data structures.
- ▷ Rust | Discrete Optimization | LaTeX | Teaching

# Working student at BMW AG

April 2018 - March 2019

- ▶ Programmed multiple Web applications (600 internal users) within a Web platform providing a unified API to diverse data endpoints within BMW IT systems.
- ▷ TypeScript | Node.js | React.js | GraphQL | Python | MongoDB | Distributed, international developer team

#### **EDUCATION**

# M.Sc. Computer Science at Technical University of Munich

2017 - 2020

- ▶ Final grade: 1.1
- ▷ Relevant coursework: Advanced Algorithms and Data Structures, Formal Methods, Algorithmic Game Theory

# Erasmus stay at Chalmers University of Technology, Gothenburg, Sweden

winter term 2017/18

▷ Relevant coursework: Programming Languages, Dependent Types (Agda)

## B.Sc. Information Systems at Technical University of Munich

2014-2017

▶ Final grade: 1.4 (top 5% of students)

## Abitur at Ellentalgymnasien, Bietigheim-Bissingen

2014

▶ Final grade: 1.8

## SELECTED PROJECTS

## Codecrafters 2

- ▷ Implemented a Bittorrent Client, Redis Server from scratch
- ▶ Rust | Async Programming | TCP Sockets

## Generic Tactic Tracing in Isabelle

- ▷ Extended the Proof Assistant Isabelle (200,000 lines of Standard ML code) to trace and hierarchically display all invocations of rewrite rules in the simplification engine's core
- ▷ Standard ML | Scala | Formal Methods

# LANGUAGES

▷ German: native | English: fluent | Latin: Großes Latinum

## SELECTED ACTIVITIES AND AWARDS

▷ Scholarship program TUM: Junge Akademie 🖸

2016 - 2017

▷ Symphony orchestra Junge Münchner Symphoniker 🗹

2014 - 2023