Christoph Gerling

□ christoph.gerling1603@gmail.com —

in Christoph Gerling — ○ Cyber-Griffo — (christophgerling.com — 🏰 Backnang, Germany

Summary — Fullstack Webdeveloper specializing in React, Next.js, and TypeScript with an eye for design. I build modern, responsive web applications with cutting-edge technologies to create exceptional digital experiences. Creative thinker with a passion for elegant solutions and attention to detail.

Skills

Languages Java, C#, C++, Python, Assembler Frontend React, Next.js, TypeScript, JavaScript, HTML/CSS

UI/Design Tailwind CSS, Figma, Responsive Design

Backend Node.js, Supabase, Firebase **Mobile** React Native, Flutter

DevOps Git, Docker

Other AI Integration, Cross-Platform Development

Experience

Tagueri AG 2024 - 2025Working Student AI Competence Center

- Developed internal tools and proof of concepts, particularly in the field of AI

- Supported team with knowledge of web technologies and distributed systems
- Contributed to customer projects applying expertise in modern web development
- Built proof of concept applications showcasing innovative solutions

2023 Tagueri AG Working Student IT Department

- Focused on development of internal web applications

- Deepened practical knowledge in web development technologies
- Supported the team in their daily work while pursuing studies
- Worked on various projects to enhance internal operations

2022 - 2023Tagueri AG **Internship** IT Department

- Gained practical experience in IT administration and support

- Focused on network administration and technical support
- Applied theoretical knowledge from studies to real-world scenarios
- Developed insights into daily operations of an IT department

Education

Aalen University 2024 - Present

Master of Science in Computer Science

- Focus: Software Engineering and Artificial Intelligence
- Key courses: Advanced Software Engineering, Predictive Analytics, App Development
- Currently working on master's thesis at the German Research Center for Artificial Intelligence (DFKI)
- Thesis topic: 'Extending a clinical gait data repository for interactive video data support'
- Expected graduation: 2025

Bachelor of Science in Computer Science

HFT Stuttgart University of Applied Sciences

- Specialized in Software Engineering with focus on web technologies and application development
- Graduated with honours and twice nominated for the Novatec Sponsorship Award
- Key courses: Advanced Algorithms, Database Systems, Software Architecture
- Bachelor's thesis: 'Analysing Smartphones and Laptops with Regard to Ecological and Economic Criteria for Sustainable Technology Decisions' in collaboration with Tagueri AG

Technical High School Backnang

A-Levels - Specialized in Computer Science

- Graduated with honours
- Main subjects: Computer Science, Mathematics, Chemistry

2020 - 2024

Grade: 1.4

2017 - 2020

Grade: 1.8

PDF Chatbot Full Stack Project

- Created a self-hosted AI assistant for PDF document interaction using Next.js and FastAPI
- Implemented advanced similarity search for precise document retrieval
- Designed secure authentication and document management systems
- Developed for on-premise deployment with Docker for complete data privacy
- Technologies: React, Next.js, TypeScript, Python, FastAPI, Docker, Supabase

OSM Routing Simulation

Full Stack Project

- Developed an interactive web application for routing algorithm visualization using OpenStreetMap
- Implemented and optimized various routing algorithms (breadth-first search, Dijkstra, A*)
- Created efficient graph contraction techniques reducing computational effort by up to 95%
- Achieved computation speedup by a factor of 20 for highway networks
- Technologies: OpenStreetMap, Node.js, JavaScript, Pug.js
- **○** github.com/Cyber-Griffo/osm-routing-simulation

Quote Number Generator

Full Stack Project

- Built a web application for managing and approving quote/offer numbers with role-based access control
- Implemented secure authentication system with different user permissions
- Designed approval workflow for number creation and validation
- Developed for on-premise deployment using Next.js and Supabase
- Technologies: React, Next.js, TypeScript, Supabase, Docker

Nabelink Mobile Application

- Created a community-based Flutter application connecting neighbors to help with everyday tasks
- Designed help exchange system with direct messaging and user profiles
- Implemented geolocation-based search functionality for neighborhood focus
- Developed customization options with category systems for different types of assistance
- Technologies: Flutter, Firebase, Dart, OpenStreetMap
- **○** github.com/Cyber-Griffo/nabelink

Portfolio Website Frontend Project

- Designed and developed a personal portfolio website with modern UI/UX principles
- Implemented responsive design with dark mode support and smooth animations
- Created interactive elements to showcase projects and skills
- Optimized for search engines and performance
- Technologies: React, Next.js, TypeScript, Tailwind CSS, Framer Motion
- thristophgerling.com

About Me

Languages

- German (native), English (fluent), French (basic)

Interests

- Passionate about technology, AI, and web development
- Enjoys waterpolo, swimming, hiking, and exploring new places
- Played waterpolo in the 1st Bundesliga with SV Poseidon Hamburg in 2022/2023

Special Strengths

- Strong analytical and problem-solving skills
- Excellent communication and teamwork abilities
- Adaptable and quick learner with a passion for continuous improvement
- Detail-oriented with a focus on delivering high-quality work