Henry Richter

+49 17657 660097 | hr.richterhenry@gmail.com | github.com/h3nryc0ding

EDUCATION

Diploma in Computer Science October 2021 – September 2026
Dresden University of Technology *Dresden, Germany*
- Grade average: 1.5 (German grading, 3.7–4.0 GPA)

EXPERIENCE

Associate Software Developer Intern - Kubernetes September 2024 – March 2025
ServiceNow *Dublin, Ireland*
- Kubernetes Distribution: Refactored Ansible deployment pipeline by extracting reusable components into shared collections/plugins and improving integration with the Configuration Management Database (CMDB), a system for tracking IT assets and configurations. Rewrote playbooks to replace shell/command tasks with public Ansible plugins for better reliability.
- Infrastructure Bootstrapping: Deployed core components via Flux using Helm charts, including Node/GPU Feature Discovery (NFD/GFD) and Trivy for misconfiguration/security scanning.
- DevOps & Testing: Optimized GitLab Kubernetes integration test pipeline, reducing runtime by 30% and improving test accuracy. Created debug images for internal Docker builds to simplify troubleshooting.
- Internal Tooling: Developed a Go authentication package for CMDB, using Cobra for CLI functionality and integrating with Keychain, 1Password, and an in-house secret store for secure credential management.

Full-Stack Developer Working Student – Web Applications October 2022 – October 2024
Uniwunder *Dresden, Germany*
- Frontend: Migrated from Angular 14 to 16 and refactored architecture to support Ionic, enabling cross-platform deployment (iOS/Android). Improved performance with lazy-loaded routing. Built a multi-step user form with dynamic validation and seamless backend integration.
- Backend: Upgraded the existing Spring Boot backend from version 2 to 3. Added endpoints to support the multi-step form, handling complex user input and session state. Integrated Firebase Cloud Messaging for targeted push notifications.
- DevOps: Created build pipelines for Android and iOS. Set up a self-hosted macOS runner to enable iOS builds.

IT Support Working Student – First-Level Support June 2021 – September 2022
Jungheinrich *Wilsdruff, Germany*

PROJECTS

Kubernetes Deployment | *Oracle Cloud, Kubernetes, Talos, Flux, Helm, GitOps*
- Deployed a secure 3-node Kubernetes cluster on Oracle Cloud using Talos Linux, following GitOps practices with Flux CD and secret management via SOPS with Age.
- Provisioned a production-grade infrastructure stack with Cilium CNI, OpenEBS for persistent storage, and database operators including CloudNativePG and MongoDB.
- Automated ingress, DNS, and TLS with NGINX Ingress Controller, ExternalDNS, and Cert-Manager.

Livechat WebApp | *Spring Boot, SvelteKit, MongoDB, Docker, Helm*
- Built a live chat web application using Spring Boot and SvelteKit.
- Implemented real-time messaging via WebSockets and integrated MongoDB for data persistence.
- Developed a GraphQL API using Netflix DGS and secured the application with Spring Security and OAuth2.
- Containerized the application and created a Helm chart as a proof of concept for Kubernetes deployment.

TECHNICAL SKILLS

Languages: Kotlin, Java, Go, Python, TypeScript, C++, SQL, HTML/CSS
Frameworks: Spring Boot, Angular, SvelteKit
Infrastructure: Kubernetes, Docker, Helm, Flux, Ansible
Developer Tools: Git, GitHub/GitLab/Bitbucket CI/CD