AXEL GEIST

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Profile: *Communicative software engineer with Start-Up (PropTech) experience and a background in Real Estate. Strong detail oriented and a get things done attitude.*

SKILLS

- Golang | Java | c++ | Python | Scala | JavaScript | TypeScript | React | Spring | Django | PostgreSQL | Unix | Bazel
- Docker | Kubernetes | Temporal | Key Vault | Datadog | Testing | Git | CI/CD | Distributed-Systems | Microservices
- German (native) | English (bilingual) | Dutch (B1)

EXPERIENCE

Software & Site Reliability Engineering | Intern   **Datadog**   Paris, France   *06/2023 – 12/2023*

- Implemented and deployed to Prod an **API-Load-Testing** service from scratch using the latest technologies of **Golang, TypeScript, React, Docker, Kubernetes, Bazel, Key Vault, Temporal,** and **internal services.**
- The API-Load-Testing service supports **10k requests/second** by simulating multiple virtual users via temporal. If needed, **100k requests/second** can be supported by upscaling temporal worker pods via **Kubernetes**.
- The api-load-testing service is used internally by **6 teams** (growing) at the time I was finishing my internship.
- Implemented a second verification system via the **Slack API** and internal Slack workers, when requesting impactful Load-Tests (triggered by total duration or virtual users threshold).
- Designed, implemented and deployed the **UI** for the API-Load-Testing service with **TypeScript** and **React**.
- Designed and implemented APIs using best practices, ensuring robust and scalable performance.
- Engineered and deployed a **PostgreSQL** database and integrated an **ORM** (Object-Relational Mapping).
- Developed multiple **Golang goroutines** for efficient asynchronous communication. For example for fetching OpenAPI Specifications from Datadog endpoints.

Software Engineering | Intern   **Thales**   Delft, Netherlands   *04/2023 – 06/2023*

- Designed the architecture for a **Secure Collaboration Platform** for the Thales' Security Operations Center (SOC), utilizing Requirements Engineering principles to align the operational needs with key stakeholders.
- Implemented the interface of the Secure Collaboration Platform using **JavaScript**, and **React**.
- Implemented APIs using best practices in **Django** and also documented the APIs with **Postman** Collections.
- Utilized **Docker** to containerize the platform to simplify deployment and improve the development experience across multiple environments.

Software Engineering | Intern   **Rohde & Schwarz**   Munich, Germany   *07/2022 – 09/2022*

- Implemented dynamic charts via **JavaScript, HTML, CSS, and Chart.js**, to visualize real time & historical data and deploy it into **Thingsboard.**
- Further develop **Thingsboard** dashboard to visualize real time data from **IoT** devices.
- Implemented warning systems on real time data with **Node-RED** and tested them by simulating real time data via **MQTT, CSV,** and **Docker.**

EDUCATION

Bachelor of Science   **Delft University of Technology**   Delft, Netherlands   *08/2021 – Present*
- Major in Computer Science & Engineering

Bachelor of Science   **Nürtingen-Geislingen University**   Geislingen, Germany   *03/2017 – 10/2020*
- Major in Real Estate Economics
- *Graduated **top 5%** - Honours Course*

Exchange Semester   **Royal Melbourne Institute of Technology**   Melbourne, Australia   *07/2018 – 12/2018*
- *Overall GPA: **4.0 / 4.0** – Highest Honours*

PROJECTS

Ray Tracing Project (**c++, OpenGL**)	Delft, Netherlands	**10.2023 – 11.2023**
Processor Scheduling System (**Java, Spring**)	Delft, Netherlands	**11/2022 – 02.2023**
Multiplayer Quiz Game: "Energy Awareness" (**Java, JavaFX, Spring**)	Delft, Netherlands	*02/2022 – 04.2022*