

STEFAN GERASCH

FREELANCER
SENIOR SOFTWARE
ENGINEER & SOFTWARE
ARCHITECT

REMOTE / HYBRID

CONTACT

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04.08.1991

LINKS

Homepage

<u>LinkedIn</u>

GitHub

LANGUAGES

German

English

PROGRAMMING LANGUAGES

C#

Java

Typescript

PHP

HTML

SQL

PROFILE

Experienced Senior Software Engineer with a proven track record of successfully leading and contributing to the development of distributed, industrial, web and mobile applications. Always emphasizing clean, maintainable and high-quality code.

Accomplished in application design, full-stack development and cloud engineering. Possesses strong methodological skills, allowing for fast adaptions to new frameworks and changing environments. Passionate for learning about new technologies and eager to further deepen existing expertise. Adept at working in collaborative team environments and continuously spreading knowledge. Provides a strong educational background with a master's degree in information systems and a bachelor's degree in computer science graduating with summa cum laude.

PROJECT HISTORY

FREELANCER DEVOPS ENGINEER

cc.systems

■ FEBRUARY 2025 — MAY 2025

Designing and evolving a modular development environment for data-driven ETL pipelines within a Kubernetes-based ecosystem. This included hands-on adaptation and optimization of existing Infrastructure as Code (IaC). The work required a high level of analytical and methodological skill, especially in navigating and enhancing complex, undocumented production setups.

Key milestones:

- Analyzed and refactored existing IaC components to improve structure, reusability, and maintainability.
- Introduced a clean and isolated testing environment to support agile development cycles.
- Extended and parameterized Apache NiFi flows and PowerBI reports to support new data processing use cases.
- Reverse-engineered undocumented configurations and workflows for structured, reproducible automation.

Used technologies:

Terraform, Ansible, Helm, Kubespray, Container, Docker, Kubernetes, Kubernetes Cronjobs, ArgoCD, External Secrets Operator, Azure KeyVault, Azure Monitor, Azure Communication Service, Prometheus, Alertmanager, Loki, Grafana, PostgreSQL, MSSQL, Kafka, KSQL, Kafka Connectors, AKHQ, Apache NiFi, NiFi Registry, PowerBI, Wiremock, Scrum, Javascript, Powershell, YAML, Markdown, Make, Prettier, WSL, GitLab, GitLab CI/CD, Linear, OpenLens, DBeaver

FREELANCER SOFTWARE ENGINEER

Industrial Machines Company

AUGUST 2024 — DECEMBER 2024

Leading the design and development of an extendable communication translation hub for the communication between industrial machines and MES systems.

FRAMEWORKS

ASP.NET

Entity Framework

UWP

WPF

Xamarin Forms

React

Blazor

WinForms

Symfony

Spring Boot

CLOUD TOOLS

Docker

Swagger / OpenApi

Kubernetes

Skaffold

ArgoCD

Helm

Redis

TOOLS

Visual Studio Code

Git

SonarCloud / SonarQube

Dependency Track

Storybook

Terraform

Ansible

COMMUNICATION

REST

SOAP (XML)

Kafka

OPC-UA

MQTT

WORKFLOWS

CI/CD

Kanban

Scrum

Unit Testing

Integration Testing

Static Code Analysis

Key milestones:

- Technical Lead of the software, designed and sustained a reliable and maintainable code structure.
- Creation of an extension mechanism to enable third parties to extend the software and easily adapt to new communication protocols.
- Improved code quality through implementing unit tests with a very good line of code coverage.
- Conducting code reviews and mentoring developers to improve code quality and ensure adherence to best practices.

Used technologies:

C#, .NET 8, .NET Framework 4.8, ASP.Net Core, MVC, Blazor, Entity Framework, MediatR, Dependency Injection, Xunit, Logging (Serilog), Code Coverage, Code Analyzers, JSON, REST, OpenAPI, Swagger, MQTT, Windows Services, Windows Task Scheduler, Windows Event Viewer, Windows Sandbox, NuGet, GitVersion, CSharpier, Prettier, Advanced Installer, OpenSSL, Visual Studio Code, Markdown, YAML, Azure DevOps, Azure Pipelines, Azure Artifacts, Scrum

EMPLOYMENT HISTORY

SENIOR SOFTWARE ENGINEER & PLATFORM ARCHITECT Kurtz Holding GmbH & Co. Beteiligungs KG, Kreutzwertheim

III JUNE 2023 — JULY 2024

Leading the design and development of a new, modern, and versatile platform for industrial machines. Languages and frameworks included C# (.NET 8) and ASP.Net as well as Typescript and React.

Key milestones:

- Technical Lead and Technical Owner of the platform, ensuring seamless communication and collaboration between these services.
- Creation of a container-based infrastructure for the machine platform.
- Improved code quality through implementing a continuous integration workflow containing code reviews, SonarQube and Dependency Track.
- Designing the architecture of the platform, consisting of several standalone services communicating through HTTP, OPCUA or MQTT.
- Conducting code reviews and mentoring developers to improve code quality and ensure adherence to best practices.
- Performed performance and integration tests to identify bottlenecks and optimized system performance, particularly in cross-service communication.

Used technologies:

C#, .NET 8, ASP.Net Core, MVC, Entity Framework, AutoMapper, Dependency Injection, Xunit, Logging (Serilog), Background Tasks, Code Coverage, Code Analyzers, CSharpier, Typescript, React, NPM, JSON, JsonSchema, REST, OpenAPI, Swagger, JWT, OIDC, OAuth2 (Zitadel, KeyCloak), MQTT, OPC-UA, Integration Tests & UI Tests (Robot Framework), Docker, Compose, Terraform, Nginx, Traefik, PostgreSQL, SQL, DBeaver, Git, SonarQube, Dependency Track, Visual Studio Code, Markdown, YAML, Azure DevOps, Azure Pipelines, Azure Artifacts, OpenSSL, Prettier, WSL, Confluence, Scrum

COLLABORATION

Azure DevOps

GitLab

GitHub / Gitea

Confluence

Bitbucket

Jira

LOGGING

Serilog

Log4J

Loki

Splunk

AUDIT & TRACING

Piwik / Matomo

Sentry

Application Insights

MONITORING

Grafana

Alertmanager

Prometheus

AUTH

OIDC

OAuth2

Zitadel

Keycloak

JWT

OPERATING SYSTEMS

Windows

Linux & WSL

Unix

Мас

Android

iOS

SCHEDULING

Kubernetes Cronjobs

Cron

Background Tasks

SENIOR SOFTWARE ENGINEER

s.Oliver Bernd Freier GmbH & Co. KG, Rottendorf

III JULY 2021 — MAY 2023

Leading the design and development of the s.Oliver internal B2B shop platform.

Key milestones:

- Technical Lead and Technical Owner of the shop platform, ensuring the code quality, smooth operation and innovation of the platform.
- Conceptualizing and executing the migration of the on-premise platform to a state of the art distributed Kubernetes cloud stack.
- Leading the redevelopment of the antiquated Symfony frontends as React single page applications.
- Conducting code reviews and mentoring developers to improve code quality and ensure adherence to best practices.

Used technologies:

The technologies listed below were used throughout my entire tenure at s.Oliver across various roles.

Java, Java EE, PHP, C#, Typescript, HTML, JSON, SQL, .NET 8, JEE, Spring Boot, Symfony, ASP.Net, ASP.Net Core, Entity Framework, Doctrine, Dependency Injection, Xamarin Forms, iOS, Android, Mac, UWP, React, REST, OpenAPI, Swagger, OAuth2, Redis, MariaDB, MySQL, IBM DB2, Elasticsearch, Kafka, Prometheus, Grafana, Loki, Sentry, Splunk, Piwik/Matomo, Application Insights, Log4J, Docker, Compose, Skaffold, Kubernetes, Nginx, Apache, JBoss / Wildfly, Websphere, Cron, NuGet, Composer, Yarn, phpstan, phpunit, Code Coverage, Static Code Analysis (SonarCloud), Static Code Analysis (SonarQube), Monolog, Prettier, Git, TFVC, Team Foundation Server, Visual Studio, Visual Studio Code, DBeaver, Markdown, YAML, Azure DevOps, Azure Pipelines, Azure Artifacts, Linux, WSL, Docusaurus, Storybook, CMS (Cockpit), Scrum, Kanban

SOFTWARE ENGINEER

s.Oliver Bernd Freier GmbH & Co. KG, Rottendorf

Full Stack Development of the s.Oliver internal B2B shop platform. As well as B2B targeted mobile applications.

Key milestones:

- Designing and implementing REST APIs with PHP (Symfony), C# (ASP.NET), and Java (Spring).
- Designing and developing mobile applications using C#, Xamarin Forms, and the Universal Windows Platform.
- Trainer for software engineer apprentices.

DEVELOPER WEB & MOBILE

s.Oliver Bernd Freier GmbH & Co. KG, Rottendorf

■ OCTOBER 2017 — SEPTEMBER 2019

Full Stack Development of mobile applications targeted towards internal departments.

FORMATS

Markdown

HTML

CSV

JSON

YAML

XML

PACKAGE MANAGERS

NuGet

Yarn

NPM

Composer

Key milestones:

- Designing and implementing REST APIs with Java (Spring).
- Designing and developing mobile applications using C#, Xamarin Forms, and the Universal Windows Platform.
- Trainer for software engineer apprentices.

I.C.S. STUDENT & APP DEVELOPER

s.Oliver Bernd Freier GmbH & Co. KG, Rottendorf

■ AUGUST 2014 — OCTOBER 2017

Full Stack Development of mobile applications targeted towards internal departments.

Key milestones:

- · Designing and implementing REST APIs with Java EE.
- Designing and developing mobile applications using C#, Xamarin Forms, and the Universal Windows Platform.

EDUCATION

MASTER OF SCIENCE IN INFORMATION SYSTEMS & BACHELOR OF ENGINEERING IN COMPUTER SCIENCE Technische Hochschule Würzburg-Schweinfurt, Würzburg

■ SEPTEMBER 2012 — SEPTEMBER 2017

Specialized in theoretical computer science, distributed systems, media informatics, and machine learning. Graduated with a Master's degree (average grade: 1.5) and a Bachelor's degree (average grade: 1.2, summa cum laude).

Contained Projects:

- Development of an algorithm for the MCU Car Rally to track and follow lines
- Solving complex problems with the means of approximation algorithms.
- Developing and training a machine learning algorithm for recognizing images.
- Development of Android apps using Java and Android Studio.
- Creating and Refining a JPEG encoder utilizing AVX256.
- Development of an audio driver abstraction layer for the WASAPI and Core Audio interfaces.