

# Florian Kasper

## Lead Site Reliability Engineer

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Innovative Cloud-Native Developer and DevOps Engineer with extensive experience working in the design and implementation of complex IT systems. Possess in-depth understanding of various system architecture and software delivery processes. Excellent project manager well-versed in engaging with strategic customers to accelerate the delivery of mission-critical projects, as well as recommend best-practice architectures in accordance with their long-term business objectives. Effective communicator adept at cultivating technical relationships with customers, and functioning as their trusted advisor. Proven ability to apply a systematic problem-solving approach in addressing bugs, optimizing code, and automating routine tasks.

<i>Place of work</i>	<i>Germany – Preferred: Southern Germany, Austria or Remote</i>
<i>Languages</i>	<i>English and German</i>
<i>Availability</i>	<i>8/1/2023</i>
<i>Competencies and Skills</i>	<i>Development and design of scalable architectures and stacks using bleeding edge as well as well established tools and languages like Go, Kubernetes, Helm and Terraform</i> <i>Backend-Development using Go(lang), Node.JS, Ruby, PHP</i> <i>Frontend-Development with React.JS</i> <i>Asynchronous and distributed platforms Kafka, Redis und GRPC</i> <i>Setup and administration of on-premise and cloud based environments using Infrastructure-as-Code (IaC) or automation tooling like Saltstack, Ansible, Puppet or Chef</i> <i>Collaborate on Design and Development of Architecture and Design of microservice platforms on Bare-Metal, Kubernetes, AWS and Google Cloud Platform</i>
<i>Industry Know-How</i>	<i>Tech, Utilities, Sports, Industrials, Defense, Marketing</i>
<i>Previous Responsibilities</i>	<i>Software Architect / Site Reliability Engineering (SRE) / Dev-Ops / Platform Engineering</i>
<i>Education</i>	<i>until 2011 Middle Grade from staatl. Realschule Höchststadt a.d. Aisch</i> <i>until 2014 Apprenticeship at Berufsschule Erlangen</i>
<i>Certifications</i>	<i>AWS Certified Solutions Architect - Associate (SAA)</i>

## IT-Knowledge

+++ excellent Knowledge, acquired through years of project work  
++ very good knowledge, acquired through at least one longer project assignment  
+ basic knowledge, e.g. through prototypes or occasional use

<i>Compute</i>	<i>Kubernetes (+++) with CRI-O / Docker / Kata, Fargate / ECS (+++), AWS Lambda (+++), Linux / Windows / MacOS administration in on-premise environments</i>
<i>Observability</i>	<i>Prometheus (++), EFK-Stack (Elasticsearch, Fluentd, Kibana) (++), Datadog (++), Grafana (++)</i>
<i>IaC - Infrastructure as Code</i>	<i>Cloudformation (+++), Terraform (+++), AWS CDK (+++), Azure ARM (++), Ansible (++), Puppet (++)</i>
<i>Cloud Providers</i>	<i>Amazon Web Services (AWS) (+++), Google Cloud Platform (++), Microsoft Azure (++)</i>
<i>Programming Languages</i>	<i>Go(lang) (+++), Python (+++), Typescript / Javascript (+++), Ruby (++), PHP (++), Java (+), SQL (+)</i>
<i>Databases</i>	<i>MySQL (++), PostgreSQL(++), Cassandra (+), Elasticsearch(++), Redis (++)</i>
<i>OS</i>	<i>Linux (in particular Debian, RHEL, CentOS, Ubuntu, Arch and Alpine) (+++), OsX (+++) and Windows (++)</i>
<i>Protocols</i>	<i>GRPC (+++), OAuth (+++), OpenID Connect / OIDC (+++), HTTP (+++), Protobuf (+++), SMTP (++), Kafka (+), WebRTC (+), XMPP(+)</i>
<i>Methodologies</i>	<i>Git (+++), Scrum (+++), KanBan (+++), Test-Driven-Development (TDD) (+++)</i>
<i>Frameworks, Testsuites</i>	<i>Go test (+++), Kubebuilder (+++), React.JS (+++), Node.JS (+++), Ruby on Rails (++), Mocha(++), Jest(+++), ZeroMQ (++)</i>

## Project History

*multiple, latest 10/2022 -*

Dev-Ops and SRE-Consultant for  
**EnBW AG**

- Design and develop a distributed, grpc based system in go to automatically update all linux servers in the companies backend networks in regular intervals.
- Develop a headless (automated) saltstack-based command execution engine in go, which can run commands on remote servers securely.
- With custom-built go tooling, a bare-metal kubernetes cluster could be deployed in under 2 minutes compared to the previous time of 30 minutes when using kubenspray. The kubernetes components are deployed in an existing kubernetes cluster, once per sub-cluster.
- Design and configure runtime security software for intrusion- and attack vector detection during the runtime of a linux process within kubernetes.

*08/2022 - 01/2023*

Site Reliability Engineer for  
**ADB Safegate**

- Designed and enhanced a standardized helmfile-based deployment pipeline for quickly deploying kubernetes clusters with a standardized setup across different environments, platforms and infrastructure
- Support and guide the in-house development team with kubernetes training and scalable and fault-tolerant architecture patterns

*06/2019 - 11/2019, 07/2021 - 08/2022*

Platform Engineer for  
**Scout24 AG**

- Built kubernetes custom resources and controllers in go, which offer a single, standardized interface for metrics, alerts, automatic scaling and user-facing communication endpoints for internal developers. This decreased the deployment time from an average of 15 minutes to a mere 3 minutes and unrecoverable deployment failures, from an average of 1% to below 0.1%.
- Built automatic backup and restore pipelines for 5 clusters using velero. By building a custom UI, this process wraps the velero custom resources and allows for services to be moved across clusters in under 1 minute, well within the 1 hour RTO.
- During the process of an organizational carve-out, that I participated in - 150 services (of the back then 600 services) were moved - without downtime - into new organizational structures. Services were including relational databases, AWS account resources, kubernetes controllers and service deployment resources.

*12/2021 - 03/2022*

Platform Engineer for  
**IONOS SE**

- Help to build and maintain a Kubernetes PaaS offering for > 10000 customers. Tooling is fully written in go and automatically tested using CI and build pipelines

*08/2020 - 09/2021*

AWS Architect / SRE for  
**AMAN Media GmbH**

- Develop an architecture for scaling a PHP web application and asynchronous backend tasks
- Introduce Infrastructure-as-Code (IaC) to the developers and build automated CI deployment pipelines and infrastructure in Jenkins
- Introduce and establish Opsgenie for alert routing and triage and connect it to the production environment

*07/2020 -*

SRE for  
**Baxter International**

- Established reliable operation of 3 - AKS - kubernetes clusters in a development team of 400 developers, previously only accustomed to on

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premise deployments.

- Migrated 25 java-based apps to containers, automated github workflows and helm deployments for lifecycle management. This decreased the lead and deploy time for software changes from multiple hours to a maximum of 5 minutes.
- Migrated the company's source code management system with 230 repositories from Bitbucket to GitHub enterprise. Strengthened security through the use of SAML, 2-factor authentication and SCIM based user provisioning.
- Created tools in go and typescript for engineering managers to self manage their team members and to enable role based access control for each of these applications within Azure AD.

05/2018 -

### System Architect and SRE for **Juratherm GmbH**

- Concept and implementation of the companies runtime infrastructure, account and runtime security on AWS
- Design and integrate Backup and Disaster recovery plans
- Design and Develop microservice authentication patterns using OAuth/OpenID Connect and SAML

11/2019 - 04/2020

### Frontend Developer / Platform Engineer for **AutoScout24 GmbH**

- Develop a React.JS based frontend using Typescript for an online car selling platform, where car dealers can view and manage their active listings and see their performance numbers

01/2018 - 06/2019

### Software Developer and SRE for **100 days Software Projects GmbH**

- Develop an office-suite-like (Excel, Word) solution frontend for small-to-medium-sized businesses using React.JS and Typescript
- Concept and Development of a Google-Drive like storage service. Frontend is written in React.JS, backend in Go
- Concept, Development of a thumbnail generator in go. Storage is based on AWS S3. Multiple, asynchronous processing pipelines and fan-out worker patterns
- Concept and Architectural-Design as well as Development of a web-based password manager
- Concept and Realisation of a Hosting and CI infrastructure on-premise using kubernetes. Automation using ansible

03/2016 - 12/2019

### Software Developer and SRE for **seven point.media GmbH & Co. KG**

- Aid in the development of fitness center management software, which is used by 600 clients in 10 countries. Development of the backend happened in PHP, whilst the frontend was React.JS based
- Build and maintain a platform product on AWS/EKS for enabling developers easy build and deploy to their PHP app in < 5min

03/2016 - 06/2016

### Consultant and React Coach for **ERAMON GmbH**

- Coach developers on React
- Integrating React into the company's legacy software platform

03/2015 - 06/2016

### Software Architect and Developer for **VATC Technologies Inc.**

- Design and architecture of a platform for secure storage and analysis of biometric data sets (fingerprints, iris, PII) using Ruby on Rails in the backend and React.JS in the frontend, hosted on AWS
- Design and architecture of a platform for automated aggregation and

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evaluation of activities in social networks. This process made use a mixed set of web scrapers, twitter firehose and other publicly available data, written in Ruby, which pumped their data into kafka and further into cassandra, where they could be adjusted by an exercise operator to include relevant information for an analyst to identify.

01/2015 - 12/2016

SRE for  
**Corscience GmbH & Co. KG**

- Care, maintenance and servicing of the company's internal debian based server landscape. Automation was done using Puppet and Ansible
- Design and development of in-house software applications using mostly Ruby on Rails and Docker
- Consolidate 20 in-house web services into a docker based hosting platform to reduce total overhead on hosting and infrastructure maintenance

01/2015 - 03/2015

Software Developer for  
**XPANDMMI**

- Development of various platform modules for a CMS system

06/2014 - 12/2014

Software Developer for  
**Jacor Online Marketing**

- Development of an application to evaluate images and rate them

## Permanent Positions

09/2011 - 12/2015

- Completed apprenticeship as IT specialist - system integration
- from 6/14: freelance part-time job
- from 03/15: full-time freelancer

## Open-Source Engagement

GitHub

<https://github.com/nirnanaaa>