## 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.

Place of work Germany - Preferred: Southern Germany, Austria or Remote

Languages English and German

Availability 5/15/2023

Competencies and Skills Development and design of scalable cloud-architectures and stacks using

cloud-native technologies like Kubernetes, Helm, Terraform and Knative.

Backend-Development using Go(lang), Node.JS, Ruby, PHP

Frontend-Development with React.JS

Asynchronous and distributed platforms Kafka, Redis und GRPC

Setup and administration of local and cloud based environments using Kubernetes from scratch or Ansible; On Linux, Mac and Windows

Collaborating on Software Architecture and Software Design for microservice

platforms on Kubernetes, AWS and Google Cloud Platform.

Industry Know-How E-Commerce, Sports, Defense, IT, Marketing, Energy, Online

Previous Responsibilities Software Architect / Lead SRE / Dev-Ops

Education until 2011 Middle Grade from staatl. Realschule Höchstadt a.d. Aisch

until 2014 Apprenticeship at Berufsschule Erlangen

Certifications AWS Certified Solutions Architect - Associate (SAA)

## 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

Compute Kubernetes (+++) with CRI-O / Docker / Kata, Fargate / ECS (+++), AWS Lambda

(+++), plus ofc. bare Linux/Windows/MacOS Hosts

Observability Prometheus (++), EFK-Stack (Elasticsearch, Fluentd, Kibana) (++), Datadog (++),

Grafana (++)

IaC - Infrastructure as Code Cloudformation (+++), Terraform (+++), AWS CDK (+++), Azure ARM (++), Ansible

(++), Puppet (++)

Cloud Providers Amazon Web Services (AWS) (+++), Google Cloud Platform (++), Microsoft Azure

(++)

Programming Languages Go (+++), Python (+++), Typescript / Javascript + ESnext (+++), Ruby (++), PHP (++),

Java (+), SQL (+)

Databases MySQL (++), PostgreSQL(++), Cassandra (+), Elasticsearch(++), Redis (++)

OS Linux (in particular Debian, RHEL, CentOS, Ubuntu, Arch and Alpine) (+++), OsX

(+++) and Windows (++)

Protocols HTTP (+++), Protobuf (+++), SMTP (++), GRPC (++), Kafka (+), WebRTC (+), XMPP(+),

JSONschema (+)

Methodologies Git (+++), Scrum (+++), KanBan (+++), Test-Driven-Development (TDD) (+++)

Frameworks, Testsuites Go test (+++), Kubebuilder (+++), React.JS (+++), Node.JS (+++), Ruby on Rails (++),

Mocha(++), Jest(+++), Prometheus(++)

## **Project History**

#### multiple, latest 10/2022 -

## Dev-Ops and SRE-Consultant for

#### **EnBW**

- 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 kubespray. The kubernetes components are deployed in an existing kubernetes cluster, once per sub-cluster.
- Built PXE profiles and go tooling for on premise nodes to automatically join clusters using bootstrap tokens and to regularly update their software and kubelet versions. By using chroots the controller sends updates and reboot commands to the underlying system.
- Design and develop a notification system for Container CVEs (automatic rebuilds of base images and notifications for users)
- Design and configure runtime security software for attack detection during the runtime of a linux process.

#### 08/2022 - 01/2023

### Site Reliability Engineer for

#### **ADB Safegate**

- Designed and enhanced a standardized 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 a kubernetes custom resource and controller in go, which offers a single, standardized interface for metrics, alerts, automatic scaling and user-facing communication endpoints. 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 carve-out, I participated in 150 services (of the back then 600 services) were moved - without downtime - including relational databases, kubernetes controllers and resources.

#### 12/2021 - 03/2022

## Platform Engineer for

#### IONOS SE

- Build and maintain a Kubernetes PaaS offering for > 10000 customers.

#### 08/2020 - 09/2021

#### AWS Architect / SRE for

#### **AMAN Media GmbH**

- Develop an architecture for scaling a PHP application
- Introduce Infrastructure-as-Code (IaC) to the Developers
- Build out automated deployment pipelines
- Introduce and establish Opsgenie for alert routing and triage

### 07/2020 -

# SRE for Hill-Rom

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

- Infrastructure automation
- Concept and Realisation of the general infrastructure
- Design and integrate Backup and Desaster recovery plans

11/2019 - 04/2020

## Frontend Developer / Platform Engineer for

#### AutoScout24 GmbH

- Develop React.JS for an online car selling platform
- Support with organising and executing an organisational carve-out
- Develop multiple kubernetes controllers, platform infrastructure, disaster recovery and security policies from scratch

01/2018 - 06/2019

### Software Developer and SRE for

#### 100 days Software Projects GmbH

- Develop an office solution for SMB
- Develop and design an E-commerce app from scratch
- Concept, Architectural-Design and development of a password manager
- Concept and Realisation of a Hosting and CI infrastructure
- Concept, Development of a Google-Drive like storage solution
- Concept, Development of a thumbnail generator

03/2016 - 12/2019

## Software Developer and SRE for

#### seven point.media GmbH & Co. KG

- Build a cash registry and client management system for fitness centers in React.JS, which is used by 600 clients in 10 countries.
- Build and maintain a platform product on AWS/EKS for enabling developers easy build and deploy to their PHP app in < 5min.</li>

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
- Design and architecture of a platform for automated aggregation and evaluation of activities in social networks

01/2015 - 12/2016

## SRE for

### Corscience GmbH & Co. KG

- Care, maintenance and servicing of the company's internal server landscape
- Design and development of in-house software applications
- Consolidate 20 in-house web services into a docker

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 jobfrom 03/15: full-time freelancer

## Open-Source Engagement

GitHub

https://github.com/nirnanaaa