Utku **Özdemir**

SOFTWARE ENGINEER

Berlin, Germany

✉ uoz@protonmail.com | 🏠 utkuozdemir.org | 💻 utkuozdemir | ▲ Utku Özdemir | 💼 utkuozdemir | 🐦 @utkuozdemir

Summary

I am a software and infrastructure engineer living in Berlin with over 9 years of hands-on & team-leading experience.
I enjoy building robust, scalable software and taking ownership of the whole lifecycle.
With my experience in both backend application development and Cloud/DevOps, I am a strong supporter of the "you build it you run it" philosophy.
During the last few years, my main focus area is infrastructure, particularly Kubernetes, containerization and building private cloud solutions. I am also very interested in the Go programming language and the cloud-native ecosystem. I am the creator and the maintainer of a few open-source projects in those areas.
I also have extensive experience and up-to-date knowledge on building backend software using JVM languages, mainly Java and Kotlin.

Experience

KI Challenge.rs GmbH
Berlin, Germany

SENIOR DEVOPS ENGINEER — *Nov. 2020 - Dec. 2021*

- Worked on the greenfield cloud infrastructure of an e-commerce portal for an automotive corporation.

KI Challenge.rs GmbH
Berlin, Germany

TEAM LEAD & SENIOR INFRASTRUCTURE ENGINEER — *Nov. 2020 - Dec. 2021*

- **Project:** cloudmobility - Daimler AG

MobiLab Solutions GmbH
Berlin, Germany

TEAM LEAD & SENIOR INFRASTRUCTURE ENGINEER — *Jul. 2018 - May 2020*

- **Project:** cloudmobility - Daimler AG
- Lead the **Platform Infrastructure** team who was responsible of the compute, storage and network domains of the Kubernetes and Ceph based multi-tenant cloud platform.
- Lead the architectural decision processes on compute, storage and network components.
- Communicated with the other team leads on defining the API contracts between the teams.
- Wrote design proposals and decision logs for the platform infrastructure.
- Established & documented coding guidelines for the Ansible playbook repositories.
- Implemented Ansible playbooks to bring up multi-tenant, production-grade Kubernetes clusters.
- Created Helm charts for the management toolset of the Kubernetes clusters.
- **Technologies used:** Kubernetes (kubeadm, CRDs and custom controllers, PodSecurityPolicies, RBAC, Admission Webhooks, dynamic persistence provisioners), Containerd, Docker, Helm, Istio, Cilium, Nginx Ingress, Ansible, Go, HAProxy, Keepalived, CEPH, MAAS, BGP, KVM, gVisor, AppArmor, bare-metal servers.

SYSTEM & CLOUD ADMINISTRATOR — *May 2018 - May 2020*

- Migrated various applications that are running on Azure to Google Cloud, to managed Kubernetes clusters and other managed GCP resources.
- Identity Access Management of the cloud resources on Azure and Google Cloud.

SENIOR KUBERNETES & DEVOPS CONSULTANT — *Mar. 2018 - Apr. 2018*

- **Project:** Mercedes pay - Daimler AG
- Worked on the payment provider system as a technical Kubernetes and devops consultant.
- Assisted the team with managing their deployments on Kubernetes.
- Set up and configured the monitoring and logging components, database backups, Helm charts, build pipelines.
- **Technologies used:** Kubernetes (with no-root policy and other restrictions, NetworkPolicies, Ingresses), Helm, EFK, Prometheus, Grafana, AlertManager, PostgreSQL, Traefik.

ENGINEERING LEAD — *Jan. 2018 - May 2020*

- Worked on establishing the engineering practices in the company while collaborating with the other leads. Documenting these practices.
- Worked on defining the recruitment process, preparing technical challenges and conducting technical interviews.

BRANCH MANAGER — *Oct. 2017 - May 2020*

- Recruitment for the Berlin office
- Budget planning
- People & resource management

- **Project:** Master Data Management Platform - Metro AG
- Lead a team on building a Master Data Management platform that allowed product attribute validation and enrichment.
- Developed microservices using Kotlin & Spring Boot that run on Kubernetes.
- Designed and implemented a fuzzy search with autocomplete on all master data items using Apache Solr.
- Designed the data model for Cassandra to ensure that the data is evenly distributed and fetched optimally.
- Implemented on-the-fly XML<>JSON transformation for integration with the legacy systems.
- **Technologies used:** Java 8, REST, Kotlin, Spring Boot, Hystrix, Zuul, Cassandra, Solr, Docker, microservices, Kubernetes, Jenkins.

Backend Engineer   *Oct. 2015 - Feb. 2017*

- **Project:** Article Cache - Metro AG
- Worked on a central master data storage system that has acted as a data streaming platform.
- Implemented a persistent queue on a distributed filesystem using Java concurrency API and file locks.
- Implemented a rotating XML storage to circumvent the restrictions of HDFS.
- **Technologies used:** Java, GPFS, WebLogic, JAX-RS, Oracle DB

- **Project:** Up to Growth! - Metro AG
- Worked on the backend of a mobile application that aims to increase productivity of meetings.
- **Technologies used:** Java, Spring, Azure SQL, Azure Blob Storage.

Turkish Armed Forces   *Ankara, Turkey*

Software Developer   *Mar. 2015 - Sep. 2015*

- Completed the compulsory military service.
- Developed small scoped desktop apps to assist various departments.
- Provided limited IT support.

Imona Technologies Ltd.   *Istanbul, Turkey*

Backend Engineer   *Jan. 2013 - Mar. 2015*

- **Project:** ImonaCloud Platform
- Worked on the development of an app-PaaS consists of an in-browser cloud application development platform & marketplace.
- Was responsible for installation, preparation of environment (Java Runtime, Application Server, Web Server, Load-Balancing, Database, Firewall, Forwarding etc.) and maintenance of more than 15 Linux (Ubuntu) servers.
- Was responsible for installation of continuous integration tools, build automation and deployments.
- **Technologies used:** Java, Vaadin, Hibernate, Tomcat, Ubuntu, MVEL.

Vodafone Turkey   *Istanbul, Turkey*

Intern   *Jul. 2011 - Feb. 2012*

- Worked on the Data Warehouse, Data Quality department.

IBM Turkey   *Istanbul, Turkey*

Intern   *Jul. 2010*

- Worked with Java EE Technologies: JSP, JSF.

Open Source

pv-migrate	CLI tool to easily migrate Kubernetes persistent volumes
nvidia_gpu_exporter	Nvidia GPU exporter for prometheus using nvidia-smi binary
helm-charts	A set of Helm charts for the applications I use
ansible-role-nebula	Ansible role to install Nebula overlay VPN
	See my GitHub profile for more

Education

Galatasaray University   *Istanbul, Turkey*

B.S. in Computer Engineering   *Sep. 2007 - Jun. 2012*

- Degree: 3 of 35
- Graduation Thesis : Development of a Blood Pre-transfusion System for Turkey

Skills

Infrastructure	Docker, Kubernetes, Helm, Rancher, Vagrant, Terraform, Ansible, Azure, GCP, Ceph
Backend	Spring Boot, Hibernate, Maven, Gradle, REST APIs
Programming Languages	Java, Kotlin, Python, Go
Databases	Postgres, MySQL, SQL Azure, Cassandra, Solr
Spoken Languages	Turkish: Native, English: Advanced, German: Basic

Certifications

2019	**Google**, Google Cloud Certified Professional Cloud Architect
2015	**Oracle**, Oracle Certified Professional, Java SE 7 Programmer
2015	**Linux Professional Institute**, Linux Professional Institute Certified I - LPIC-1