

## PROFILE

Accomplished software engineer with extensive experience in distributed systems and machine learning platforms. Proven ability to drive complex projects from concept to production while delivering scalable, high-impact solutions.

## EXPERIENCE

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2020-PRESENT

### Lead Software Engineer, Katulu

Hamburg, Germany

Design and implementation of *Hypha*, an open-source platform for composite machine learning on heterogeneous GPU clusters.

Built the communication layer for and integrated machine learning technologies into Katulu's federated learning platform.

Drove design and implementation of Katulu's federated data pipeline for heterogeneous data.

Developed Katulu's inference runtime for federated learning models.

Integrated Katulu's platform into Siemens' Industrial Edge ecosystem to run on edge devices.

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2015-2020

### Senior Software Engineer, Mesosphere/D2iQ

Hamburg, Germany

Developed and integrated features for *KUDO*, an open-source Kubernetes controller, and led its integration into *Konvoy*, D2iQ's Kubernetes distribution.

Enhanced *Apache Mesos*: Designed and implemented scheduling algorithms for stateful resources, set up and maintained CI/CD and scale testing, implemented authentication/authorization, added LDAP and JWT support.

Managed open-source communities for *Apache Mesos*, *Marathon*, and related projects.

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2010-2015

### Software Engineer, LAP Laser Applikationen

Lüneburg, Germany

Led development for multiple industrial and healthcare projects, merging data from sensors and time-of-flight cameras to perform calculations in real-time.

Developed and refactored healthcare software, compliant to ISO 62304.

Implemented calibration algorithms and maintained laser projection software.

## **EDUCATION**

**University of Bremen, Bremen, Germany — Diploma in Industrial Mathematics, 2009**

## **SKILLS**

### **Competences**

Distributed systems, API design, Infrastructure setup, Test automation, Application security

### **Programming Languages**

Rust, Python, Go, C++

### **Technologies**

Kubernetes, Cloud Infrastructure (AWS, GCP, Azure), Terraform, Linux, Grafana, Docker