



Akashdeep Singh Jassal

akashdeepjassal@gmail.com | +49 15510 482925 | [linkedIn/akashdsj](https://www.linkedin.com/in/akashdsj) | [github/AkashDeepSinghJassal](https://github.com/AkashDeepSinghJassal) | akashh.dev

EDUCATION

Masters in Distributed Systems Engineering

TECHNISCHE UNIVERSITÄT DRESDEN

Dresden, DE | Oct 2024

Bachelors in Computer Science Engineering

CHITKARA UNIVERSITY

Punjab, IN | Jul 2018 - Aug 2022

WORK EXPERIENCE

TEKSCEND PHOTOMASK | WERKSTUDENT SOFTWARE ENGINEER

Dresden, DE | Mar 2025

- Developed a rule-driven validation service connecting the **ActiveMQ** broker to resolve/report any litho format errors preemptively before executing heavy planning and fracturing workloads.
- Conducted performance research to optimize Oracle DBMS queries using **Oracle AWR** profiling, implementing index and query refinement, concluding a report signifying **15 - 80%** latency reduction.
- Automated secure application delivery via **GitLab CI/CD**, ensuring stability across environments.

BELTECH AI | SOFTWARE DEVELOPMENT ENGINEER

Bengaluru, IN | Jul 2022 – May 2024

- Designed the REST microservices architecture and suite of APIs of Challan AI app using **Spring Boot** for generating violations, monitoring junction activities, managing signal controls via **websockets**, and pushing real-time notifications on violation detections via **Spring AMQP**.
- Achieved a remarkable **10x** reduction in processing time and enabling efficient handling of jobs with fewer consumers using Reactive Spring **Webflux**.
- Achieved data synchronization to elastic search and OLAP databases by using **Debezium CDC** integrating with **Celery rabbit MQ** consumers, to balance high load and foster **real-time** operations.
- Utilized elasticsearch for geo-spatial and multi-filter queries, resulting in a significant reduction in query response times from 2 seconds to **0.02 seconds**.
- Decreased incident resolution time by 30% by integrating centralized logging and monitoring with **ELK** stack

QUIKR | SOFTWARE DEVELOPER ENGINEER INTERN

Bengaluru, IN | Mar 2021 - Jun 2022

- Deployed Quikr Jobs app on **playstore currently over 1M downloads**, overseeing app signing keys setup, backend codec app signature registration, authentication and analytics integration.
- Integrated the Quikr Jobs platform with the National Career Service (NCS) portal, facilitating real-time data **migration** and **synchronization** of job status and applications, enhancing job search capabilities for seekers.

PROJECT

UNMAPPED (3RD PLACE)

PYTHON, JS, LANGGRAPH, VECTORDB | FEB 2026

- Won at **Hacknation Global AI Hackathon** by designing a multi layer **agentic** architecture that normalize informal skills, to standard taxonomy, then matches and ranks opportunities using labour market signals
- Developed application using **LangGraph**, **FastAPI**, **ChromaDB**, and **DuckDB** for skills extraction, vector similarity search, and country-specific opportunity matching using ESCO and World Bank datasets

CERTIFICATIONS

- Kubernetes Certified Application Developer (CKAD) [credential](#)

SKILLS

Prog. languages & Framework Java, Javascript, HTML/CSS, SQL, Python, Springboot, Node, React, Reactive Java, Django

Technology: Elastic Search, Kafka, Rabbit MQ, Git, Jenkins, AWS, Docker, MongoDB, MySQL, Grafana, Debezium

Languages Spoken: English(C1), German(A2), Hindi(Native)