Kushal Chordiya *Software Engineer*

✉ chordiyakushal@gmail.com   📞 +91-9022149921   in Linkedin   ⊙ Github

EDUCATION

Pune Institute of Computer Technology,   08/2017 – 07/2021 | Pune, India
Bachelor of Engineering 🔗

SKILLS

Programming Languages	Frameworks	Platforms
Python, JavaScript/TypeScript, Java, Golang, SQL	FastAPI, Express, React, Pytorch	AWS, Linux, Kubernetes

PROFESSIONAL EXPERIENCE

SDE-2, *Trilogy Innovations (Formerly Codenation)* 🔗   08/2022 – present | Bengaluru, India

- **Led two teams** in the development of a social media app, to assist students with memorising content; researched and applied proven user engagement and memory retention techniques.
- Optimised a cloud IDE product; dynamically adjusted Kubernetes node affinities, that enabled multi-architecture support in a single EKS cluster; **achieved a 50% reduction in operating costs.**
- Built a highly scalable semantic search engine for LLM-powered search with AWS Lambda and AWS OpenSearch; optimised a custom lambda runtime for a **150ms cold start latency, processing an average throughput of 3k RPS.**
- Developed a low-latency reverse proxy with Express and Redis, for rate-limiting and analytics for LLM usage; designed with a well-thought-out architecture, **maintaining an average latency of ~4ms.**

SDE, *Trilogy Innovations (Formerly Codenation)* 🔗   07/2021 – 07/2022 | Bengaluru, India

- Streamlined the architecture of an existing data processing pipeline, from many complex micro-services to one lean & efficient monolith.
- New architecture **increased processing capacity from ~50GB to ~200GB/day and reduced operating costs from ~$3k to ~$1k/month.**
- Contributed support for three new languages to the internal code analysis platform, using Java Micronaut framework on GKE; scaled the platform to **analyse more than a billion LoC weekly.**
- Designed a dashboard with code quality insights and weekly coaching cycles for developers with AWS Quicksight.
- Innovated a novel solution for managing application logs, using BTrace for runtime byte-code instrumentation and OpenTelemetery to group logs & traces across services; **lowered log ingestion cost by up to 80% while also enabling 2x faster RCA** for failures & outages.

Software Developer, *Zubi Infotech*   01/2020 – 07/2021 | Mumbai, India

- Developed an automated adaptive skill test that dynamically adapts difficulty level based on user performance.
- Generated customised learning paths for students based on the results of adaptive tests; **user retention improved by 40%** after the introduction of customised learning paths.
- Implemented a **real-time ComputerVision-based proctor** for online tests; used PyTorch models distilled using ONNX runtime to **run on CPU with sub 50ms latency.**
- Further reduced latency by sampling user streams and batching operations to leverage vectorised computing.

PUBLICATIONS

Big Data Analytics for Sustainable Cities, *11th ICCCNT* 🔗   07/2021
Analysis of tree cover across cities to generate insights about sustainability.

DPSRGAN, *6th I2CT* 🔗   04/2021
A novel Generative Adversarial Network architecture to increase the resolution of images.