

MAHEEP KUMAR

Building High-Performance Distributed Systems at Scale

me@maheepk.net

github.com/technusm1

Pune, Maharashtra, India

(+91) 94175 76175, (+91) 79735 40746

linkedin.com/in/technusm1

PROFESSIONAL SUMMARY

Senior Software Engineer with 9 years of experience building cloud-native, distributed SaaS platforms and database-adjacent infrastructure. Strong background in designing control-plane services, Kubernetes orchestration, and highly available systems using Go, Kotlin, Rust, Elixir, and Python. Deep experience with PostgreSQL ecosystems, CI/CD automation, and production debugging at scale.

WORK EXPERIENCE

Senior Software Engineer - Data and AI

June 2025 – Present

HG Insights

Pune, Maharashtra, India

- Designed Location Resolution & Disambiguation (LRaD) service improving fill rate from 45% to 83% for firmographics and intent data, processing 1B+ records weekly
- Built distributed company and contracts data curation service using Ash/Phoenix/Elixir leveraging AI + web scraping
- Designed Kubernetes deployment patterns using Helm and tuned resource requests/limits and autoscaling policies for latency-critical services
- Designed and maintained backend services (Java/Python) for data ingestion and orchestration pipelines supporting AI-driven enrichment workflows

Engineering Team Lead - Caching

Jan 2025 – June 2025

TripStack (Etraveli Group)

Pune, Maharashtra, India

- Led zero-downtime migrations (REST to gRPC) across critical services, reducing payload sizes by 60%, simplifying service evolution, and accelerating cross-team development velocity by 40%
- Drove 5% booking conversion uplift through strategic cache optimization and ML-powered invalidation strategies

Senior Software Engineer - Caching

Apr 2024 – Jan 2025

TripStack (Etraveli Group)

Pune, Maharashtra, India

- Designed and operated ML-powered caching services on Kubernetes, tuning resource requests/limits, autoscaling behavior, and rollout strategies to maintain 3ms p99 under peak traffic
- Optimized FareShare export service: reduced runtime from 40min to 7min (82%) and memory from 48GB to 250MB (99.5%)
- Participated in production incident response, debugging latency, correctness, and scaling issues in high-throughput distributed systems

Software Developer - R&D

2023 – 2024

Tinymesh

Mohali, Punjab, India

- Led 5-engineer team as senior-most developer, managed recruitment and technical direction for Tinymesh AMI platform, deployed across 7 cities in Punjab, India
- Developed tinymesh-cc-tool enabling streamlined firmware OTA updates and CI pipelines for large-scale IoT deployments using Rust, Tauri and Leptos Framework

Software Developer - FX Trading

2017 – 2019

ION Trading

Noida, Uttar Pradesh, India

- Migrated WSS FX trading systems to microservices architecture, improving scalability and reliability for capital markets back office workflows

TECHNICAL SKILLS

Languages

Elixir Go Rust
C Kotlin Python

Databases

PostgreSQL Citus PgBouncer
SQLite Redis

Cloud & Infrastructure

AWS AWS GCP Docker
Kubernetes GitHub Actions Jenkins
Concourse Argo CD

Auth & Security

OAuth 2.0 JWT OpenID Connect
SAML mTLS Ueberauth

Tools & Frameworks

Phoenix Spark Bash
Git gRPC Protobuf
GraphQL Kafka REST
Prometheus Flask Django

MY PROJECTS

- DedupX** - macOS duplicate file finder with perceptual image matching and incremental hashing. 200+ paying and satisfied customers.
- Cronexpr** - Cron expression parsing library

KEY ACHIEVEMENTS

- Scaled distributed caching to 1B+ daily requests, 3ms p99 latency
- Saved \$24k/month using gradient-boosted models for targeted cache invalidation
- Built location disambiguation service: 45% → 83% fill rate
- Migrated services to gRPC: 60% payload reduction, 40% faster dev cycles

EDUCATION

B.E. Computer Engineering

Thapar University, Patiala, Punjab, India

2013 – 2017

CGPA: 8.35

LANGUAGES

English Hindi Punjabi