

# Ravi Prakash

Professional with 7+ years of full time experience in Backend Software Development (Golang, Python, Java), MLOps, IOT across several product-based startups. Ability to hack around multiple technologies and build highly scalable, low latency, concurrent, distributed systems, RESTful services

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[LinkedIn](#) | [Portfolio](#) | [Github](#) | [Leetcode](#) | [Medium](#) | [StackOverflow](#) | [Designs](#)

## TECHNICAL SKILLS

**Programming Languages:** Golang, Python, Java

**Databases:** Cassandra, GCP Bigtable, Neo4J, DynamoDB, Apache Pinot, MongoDB, Elasticsearch, Kafka, AWS SQS, SNS, RabbitMQ, MySQL, PostgreSQL, GCP BigQuery, ClickHouse, Redis, Aerospike, Solr, Delta lake

**Frameworks and Libraries:** Spring-Boot, Go-gin, go-mux, gorm, Django, Flask, FastAPI, Sanic, Pandas, Keras, Computer Vision, Asyncio, Terraform, Apache Spark, Airflow, Mlflow, Kubeflow, Vertex AI, Azure ML, Tensorflow, Keras, Pytorch

**Monitoring and Observability:** Prometheus, Datadog, Grafana, Kibana, ELK, GCP Cloud Trace, Sumologic, OpenTelemetry

## EDUCATION

[\*\*NSUT \(formerly NSIT, University of Delhi\)\*\*](#), New Delhi — *Bachelor in Engineering*

2014 - 2018

**Branch - Computer Engineering, CGPA 8**

## EXPERIENCE

**AiStrike, Remote — Senior Engineer**

Dec 2024 - Present

- **Architected** and implemented enterprise-scale microservices using Spring Boot and OpenJDK 17, integrating **PostgreSQL, Neo4j**, and **MongoDB** in a **Kubernetes** environment, ensuring high availability and scalability.
- Led development of mission-critical security systems including a Risk Booster platform with advanced **Neo4j** query capabilities and an AI-powered Compliance Questionnaire system leveraging **AWS S3**
- Engineered automated **AWS infrastructure** solutions including multi-account onboarding and cross-regional monitoring systems, improving operational efficiency and resource management using **Python(FastAPI)**
- Implemented comprehensive security enhancements across **Docker** containers and developed a centralized vulnerability management platform integrating multiple scanning sources
- Optimized system performance through **Redis** caching implementation and **Kafka**-based real-time data synchronization, significantly improving response times and indexing client data in **Apache Solr** cluster.
- **Skills: Python, Golang, Java, Neo4J, PostgreSQL, MongoDB, Solr, Kubernetes, Redis, Kafka, AWS, Azure**

**Brightedge, Remote — Software Engineer 3**

Aug 2023 - Dec 2024

- **Led the initiative** in page based recommendation team by maintaining and enhancing backend systems thereby improving recommendation accuracy from 92% to 98% for global and corporate accounts.
- Developed and optimized internal admin tools and backend systems, including a centralized data source for local businesses and a public API for accessing local business data.
- **Architected and led a team of 4 Junior Dev** implementing end to end features for monitoring and syndicating business listings across Google, Apple, and Bing Maps, including holiday hours, service area management, centralised display of business insights and review management system for new businesses on the Brightedge Local business management platform. Incorporated trial features, businesses onboarding flow for seamless integration.
- **Skills: Python(FastAPI),Golang, PostgreSQL,Bigquery,Solr, Docker, Kubernetes, Redis, Azure,Kafka, AWS**

## Tekion Corp, Bengaluru — ML Engineer

July 2021 - Aug 2022

- Driving design and development of **distributed batch** and **streaming ETL** processing pipeline
  - Responsible for setting up a scalable, cheap, ACID compliant **delta lake** storage over **AWS S3** for storing processed raw facts known as features and batch prediction results of ML models, replacing **PostgreSQL**. [Blog](#)
  - Responsible for development and maintenance of internal python clients and tools packages using **poetry, pip**.
  - Optimized top k recommendation API latency by doing batch **cosine similarity** calculation and **serializing high dimension feature vectors** in **Apache Parquet** and storing it in an **FAISS embedding store**.
  - Created a bare SQL parser using **pyarrow** for ML data pipeline to facilitate direct read of raw data from delta lake warehouse. It supports query filtering over **partitioned and non-partitioned delta lake columns**, thereby reducing the need and cost of querying a managed query engine like **AWS Athena**
  - Architected a system for merging duplicate sales leads using **Dedupe, Spark, Delta lake, Kafka, AWS Athena**.
  - Splitting **sales chat app** built using **RASA** framework into containerized (core and ACTION) microservice to facilitate communication among them and integrated our observability tools and dynamic model loading.
  - Improved ML serving APIs performance by converting all I/O bound tasks into asynchronous calls. Migrated from **flask** to **Python(FastAPI)** and added parallelism through **uvicorn** workers and added API observability.
- Skills - **opentelemetry, elastic-apm, Elasticsearch, Kibana, Azure**

## magicpin, Gurugram

### Tech Lead

Aug 2022 - Jan 2023

- **Led organisation wide Observability Initiatives**
- Deployed **Prometheus** in GKE for monitoring and integrated clients in **Go, Java, and Python**.
- Optimized metric ingestion with relabeling filters.
- Designed serving architecture for **Google Vertex AI** model using **FastAPI** and **Bigtable**.
- Built pipelines for feature calculation, real-time predictions, and data sync between **BigQuery** and **Bigtable**.
- Implemented **Kubernetes** jobs for model scoring and established **CI/CD** workflows for deployment.

## Software Engineer

June 2018 - Dec 2020

- Responsible for continuously evaluating recent technologies and driving architecture and design decisions on various critical backend systems (**Social Media Feed, Order Management System, Search, Transaction**) and ownership to run and maintain **GCP** cloud infrastructure. **Skills: Apache Solr, Cassandra, Neo4J, Elasticsearch**
- Performed **dataset collection, feature engineering**, training using transfer learning on **InceptionResnetV2** and developed model inference using **RESTful flask service** with **Nginx** Load Balancer for [selfie classification](#)
- Migrated 21 TB data from **21 node Cassandra cluster** to **Google Cloud Bigtable** cluster with redesigned schema ensuring **row key entropy**.
- Migrated a tightly coupled **Java-MySQL monolith** backend stack to decoupled, low latency, **Golang microservice** with **denormalized MySQL schema** thereby improving availability and reducing infra costs.
- Designed and developed a new low latency, highly available **reverse-proxy layer** using **Golang (gin)** between **backend microservices** and App/Website with proper **Authentication** and **Authorisation** mechanism.
- Designed and developed **concurrent 5 layer trending pipeline (Kafka, Golang, Elasticsearch, Cassandra)** which generates scores accumulated over days with decaying functions for various social entity in our app like posts, hashtags, merchants, users, friends and using **worker-pool, pipeline, barrier concurrent** design patterns
- Designed and implement **Kafka** consumer and **Golang (mux)** API Flow for projects like Merchant Rating calculation based on Bayes estimation , merchant complaints and review flow and Hashtag Feed and Campaign Feed and selfie and hashtag approval flows, groupbuys, merchant and user feed.

## CERTIFICATES AND AWARDS

- [Neo4J Certified Graph Developer - Professional](#)
- Awarded Most Valuable Player (MVP) in magicpin for good performance
- [Programming with Google Go by University of California, Irvine](#)
- [Google Cloud Platform Fundamentals: Core Infrastructure](#)
- [Confluent Kafka Fundamentals Accreditation](#)
- [Go \(Intermediate\)](#)
- [DeepLearning AI Tensorflow Developer](#)