

BHARATH DARSHAN BALAR

darshanbalar01@gmail.com | [linkedin.com/in/darshanbalar](https://www.linkedin.com/in/darshanbalar) | [darshan-balar.github.io](https://github.com/darshan-balar)

Speaker, PGConf India 2024 — "Real-Time Data Processing using Go and PostgreSQL"

Senior Backend Engineer | Distributed Systems & Real-Time Data Infrastructure | Go

Backend engineer with 4+ years building high-throughput, event-driven systems in Go. Architected a real-time analytics pipeline ingesting **25–30M call events/day** (Kafka, OpenSearch) and image infrastructure serving **20M+ requests/day**. Depth in stream processing, performance tuning, and AWS backends.

EXPERIENCE

Member of Technical Staff - 2 | Exotel Techcom Pvt Ltd

Sep 2024 – Present

- Real-Time Analytics Pipeline:** Architected an event-driven post-call analytics pipeline on Kafka and OpenSearch, ingesting **25–30M call events/day** and enabling end-to-end call journey tracing that reduced debugging time to resolution.
- Pipeline Reliability:** Designed at-least-once delivery for the ingestion consumers (~**2K events/sec peak**): offsets committed only after each batch fully resolves, transient OpenSearch failures retried, and exhausted events routed to a fallback topic, with idempotent writes keyed on producer-assigned event IDs making replays duplicate-free. Sized the topic at **500 SID-keyed partitions** to support consumer autoscaling from **30 to 200** instances.
- Search Infrastructure on Kubernetes:** Deployed and operate a self-managed **24-node OpenSearch cluster on EKS** via Helm: 18 data nodes on local NVMe (i3), dedicated master and coordinating nodes, master state on EBS, and 2 replicas per index to tolerate node loss.
- Call Latency Optimization:** Reduced end-to-end call setup latency by **30%** by redesigning cross-server call bridging, moving to direct IP calling integration between telephony servers.

Senior Software Engineer | IndiaMART InterMESH Ltd

Dec 2023 – Sep 2024

- Image Deduplication System:** Designed a perceptual-hashing deduplication service that returns existing image URLs instead of storing duplicates, cutting storage costs by **30%** and improving upload response times by **20%** platform-wide.

Software Engineer | IndiaMART InterMESH Ltd

May 2022 – Nov 2023

- Image Processing Platform:** Built a Go image-conversion service on libvips (bimg) serving **20M+ requests/day** across JPEG/PNG/WebP/AVIF, and led migration of **300M legacy images** to WebP via a batch pipeline — cutting page rendering time by **30%** and image storage by **40%**.

Engineering Intern | IndiaMART InterMESH Ltd

Jan 2022 – May 2022

Software Engineering Intern | Cadence Design Systems

Aug 2021 – Jan 2022

SKILLS

Languages	Go, Python, C
Streaming & Data	Apache Kafka, OpenSearch, PostgreSQL, Redis, RabbitMQ
Infrastructure	AWS (EKS, EC2, S3), Kubernetes, Helm, Docker, CI/CD
Architecture	Event-Driven Architecture, Microservices, Distributed Systems, REST APIs

PROJECTS

Paper Trading Platform — Go, PostgreSQL, Redis, Docker, WebSockets

Real-time stock paper-trading platform: live market data over WebSockets, portfolio management, trade execution, and Redis-cached intraday price search.

EDUCATION

M.Tech, Information Systems Security Engineering — NIT Jamshedpur	8.85 GPA 2020 – 2022
B.Tech, Computer Science and Engineering — REVA University, Bengaluru	9.00 GPA 2016 – 2020

ACHIEVEMENTS

- Winner** — Makeathon (Smart Parking IoT), Mini Hackathon (Mind Games); Core Member, GLUG REVA