

Ashutosh Kumar

+91 6299707602 | kumarashutosh34169@gmail.com | [linkedin.com/in/bravo1goingdark](https://www.linkedin.com/in/bravo1goingdark) | github.com/bravo1goingdark | ashutoshk.pages.dev

SUMMARY

Backend engineer with production experience in **Go (Golang)**, **MongoDB**, and **RESTful API design** — building scalable, high-throughput services from bulk email engines (10k+ recipients) to event-driven pipelines on AWS. Led a 5-engineer team at Bindisa Agritech (35% latency reduction); 500+ LeetCode DSA problems; available immediately for remote roles.

TECHNICAL SKILLS

Languages: Go (Golang), Java, TypeScript, Python, Rust

Databases: MongoDB, NoSQL, PostgreSQL, MySQL, Redis

Backend & APIs: RESTful API Design, REST API Development, gRPC, Microservices, Node.js, Express.js

Cloud & DevOps: Docker, Kubernetes, AWS (S3, Lambda, ECS, EC2, ECR), Prometheus, Grafana, Loki, OpenTelemetry

Tools: Apache Kafka, Git, Postman, Prisma, Linux, Data Structures and Algorithms

EXPERIENCE

Backend Engineer & Team Lead

Bindisa Agritech | May 2025 – July 2025 | Gaya, India

- Designed and maintained **backend services and RESTful APIs** in production, owning core business logic and system architecture as team lead across a 5-engineer team.
- Optimised **MongoDB and PostgreSQL** queries and API endpoints, reducing average response latency by **35%** and significantly improving system performance and scalability.
- Collaborated with frontend and data teams to define **REST API** contracts, debug cross-service issues, and ensure consistent data flow across all system components.
- Reviewed 20+ pull requests enforcing **backend best practices** and modular design; planned and executed 2-week agile sprints, delivering all milestones on schedule.

PROJECTS

Mailgrid — Bulk Email Campaign Engine | github.com/bravo1goingdark/mailgrid

Go, MongoDB, SMTP, Google Sheets API, Goroutines, Worker Pools, React, Wails

- Built an offline-first **Go CLI** for bulk email dispatch — handles **10,000+ recipients** per run via CSV, Google Sheets, HTML templates, and SMTP, shipping as a single static binary.
- Designed a **scalable** worker-pool SMTP dispatcher with connection reuse (~450 emails/sec); stored and queried campaign data in **MongoDB (NoSQL)**, exposing controls via a clean **REST API** layer.
- Implemented token-bucket rate limiting, exponential-backoff retries, and a rule-based AND/OR/NOT filtering engine, reducing bounce rate by **10%** on production campaigns.
- Delivered a cross-platform desktop application using Wails + React with onboarding flow and template preview, demonstrating full-stack ownership from **backend service** to UI.

Video Transcoding Pipeline (Clairo) | github.com/bravo1goingdark/clairo

TypeScript, Node.js, Kafka, Docker, AWS (S3, ECS, Lambda), Prometheus, Grafana

- Built an event-driven **backend service** consuming Kafka events at scale; streamed video assets from S3 into FFmpeg containers, cutting I/O latency by **40%** and throughput by **65%**.
- Designed and exposed **RESTful APIs** to trigger and monitor transcoding jobs; orchestrated 480p–1080p workflows via ECS auto-scaling workers tied to consumer lag.
- Integrated Prometheus + Grafana dashboards for real-time ECS observability; ensured fault tolerance via offset management and **Git**-tracked retry policies.
- Implemented **secure** S3 pre-signed URL workflows for upload ingestion and output delivery, eliminating public bucket exposure and enforcing access control across all transcoding jobs.

Cloud-Native Distributed Tracing | github.com/bravo1goingdark/...

Go, OpenTelemetry, Jaeger, gRPC, Docker, OTLP

- Deployed distributed tracing in **Go** using OpenTelemetry and Jaeger across a gRPC-based **microservices** architecture, capturing full request propagation across **backend services**.
- Configured OTLP export with batch-processing span reporting for production-grade observability of **RESTful API** and inter-service interactions with minimal overhead.
- Identified critical data flows and bottlenecks via trace analysis, accelerating **system performance** debugging by **30 hours per month**.
- Integrated tracing context propagation across **gRPC** service boundaries using OpenTelemetry SDK, enabling end-to-end visibility into latency and error rates across all **microservices**.

EDUCATION

Bachelor of Technology — Computer Science and Engineering

Manipal University Jaipur | Expected July 2026 | CGPA: 8.61 / 10.00 | Dean's List — 6th Semester (Highest GPA)

- Relevant Coursework:** Data Structures and Algorithms, Object-Oriented Programming, RDBMS, Operating Systems, Web Technologies, Computer Networks, DevOps.

ACHIEVEMENTS

- Solved **500+ Data Structures and Algorithms** problems on [LeetCode](https://leetcode.com) (Java) — consistent coverage of arrays, graphs, dynamic programming, and trees.
- Founded [@themankindproject](https://github.com/themankindproject) — a Rust OSS organisation; *imgfprint* (159 downloads) and *fastarena* (135 downloads) published on crates.io; 80+ GitHub stars.
- Secured **4th place out of 128** individual participants in MUJ ACM hackathon; advanced to finals of Bit to Byte Hackathon (IEEE MUJ).
- Awarded **Dean's List** in the 6th semester for achieving the highest GPA in the cohort at Manipal University Jaipur.