

Chirag Aggarwal

Software Engineer II | Backend & Full Stack

aggarwalchirag4904@gmail.com | +91 8708602727 | Mumbai, India

linkedin.com/in/chirag-aggarwal-bu | github.com/Chirag4904

SUMMARY

Software Engineer II with 2+ years of full-time experience delivering production applications and search evaluation platforms. Skilled in Node.js, TypeScript, React, Python, AWS, and Kubernetes.

EXPERIENCE

HERE Technologies | Software Engineer II | Jun 2024 - Present

- Refactored an automated ground-truth platform for search model training and KPI calculation into modular comparison, clustering, and ML-pipeline components.
- Integrated LLM semantic similarity scoring and interactive HTML reports to classify evaluation outcomes and visualize query-level error distributions.
- Owned **end-to-end KPI drill-down** for Search, Autosuggest, Autocomplete, and Geocoder: Python report parsing, PostgreSQL storage, and UI/Tableau views for query-level snapshot comparisons.
- Implemented Python functions on AWS Lambda to compare KPI snapshots and generate on-demand reports; validated pairwise comparison logic with unit tests.
- Contributed to a benchmark platform comparing **2 deployed versions** in isolated Kubernetes environments, using Java Flight Recorder and self-service dashboards to expose CPU, heap, GC, and allocation differences.

HERE Technologies | Software Engineering Intern | Jun 2023 - Jun 2024

- Proposed and implemented a release timeline UI to show timing and status across regions, alongside AWS runner usage and production pipeline duration.
- Automated development pod provisioning and GO/NOGO-driven S3 updates.

Payatu | Full-Stack Developer | Feb 2023 - Jun 2023

- Developed production features with React, TypeScript, Express, and MySQL; introduced BullMQ background processing to move long-running tasks off the request path. Earned Achiever of the Month **3 times**.

PROJECTS

LetzGo | Peer-to-peer carpooling platform

- Architected a distributed backend serving **700+ users**, supporting ride matching, recurring commutes, live trip coordination, notifications, and Stripe Connect payment holds and payouts.
- Reduced candidate search space by **over 85%** using a 4-tier route-corridor classification algorithm before road-network queries, lowering downstream routing workload.
- Optimized multi-stop pickup-and-delivery routing with precedence constraints and precomputed distance matrices, enabling **sub-millisecond route evaluations** without repeated external API calls.
- Orchestrated Redis/BullMQ workers and Socket.IO flows for scheduling, GPS, presence, and chat; measured **P99 endpoint latency below 100 ms** in Artillery load tests, with Prometheus and New Relic monitoring.

Popin | Geospatial event discovery and organizer platform

- Launched Flutter iOS/Android apps, a Node.js/TypeScript API, and a React organizer dashboard; led **2 interns** across onboarding, analytics, and UI testing.
- Designed viewport-bounded queries with caching and thundering-herd protection, plus real-time chat, read receipts, and asynchronous OpenAI moderation.
- Established OpenTelemetry/Grafana Tempo observability and multi-stage GitLab CI/CD with Docker-in-Docker tests and automated Play Store releases.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, Dart, C++, SQL

Backend & Data: Node.js, Express, Prisma, PostgreSQL, MySQL, MongoDB, Redis, BullMQ, Socket.IO, REST, OAuth

Frontend: React, Flutter, Riverpod, TanStack Query, Redux, Tailwind CSS

Cloud & Delivery: AWS Lambda/S3, Kubernetes, Docker, GitLab CI/CD, GitHub Actions

Evaluation & Testing: LLM integration, Tableau, OpenTelemetry, Grafana, Prometheus, Gatling, Vitest

EDUCATION

B.Tech, Computer Engineering | Bennett University, Greater Noida | 2024