# **BHARAT AGARWAL**

🗣 Gurgaon, India 🔗 https://bharatagarwal.io 📞 +91 9811718987 🗷 bharatagarwal@gmail.com

#### **EXPERIENCE**

Jan 2025 - present

#### Qolaba AI, Lead AI Engineer

Gurgaon

I am in charge of data science research and AI solution implementation for the company. Till date, I have done the following::

- Architected a knowledge graph with 5000+ nodes that establishes dependencies between topics and questions. This was for the 11th and 12th grade CBSE science curriculum.
- Redesigned their API platform. Improved RESTfulness of routes, simplified job worker architecture, and refactoring out dependencies like LiteLLM. Decreased response times from 30s to ~9s.
- Delivered solutions for ed-tech clients, including pedagogy-enriched timestamps for educational videos, and multilingual subtitles/dubbing for academic lectures. This reduces manual effort from 24 hours to 3 minutes per videos.
- Built an intelligent sales agent, that validates leads and customises outreach for clients.

Stack: FastAPI, Python, Gemini SDK,, Langfuse, Neo4J, n8n, Lovable

Jul 2024 - Jan 2025

## **Shopify, Software Engineer (Infrastructure)**

Bengaluru

My team maintained a source-of-truth for all of Shopify's infrastructure, playing a part in scale testing for Black Friday, and ensuring Kubernetes best practices. We scaled up to 2.4m cores that handled upto 4.7m requests per second at its peak.

Stack: Kubernetes, Rails, Hotwire, Temporal, Buildkite

Jan 2024 - Jun 2024

#### Nova Practice Solutions, Contract AI Engineer

Remote

Developed GoldieVet  $\mathscr{D}$ , a transcription tool for veteranarians using Django and React Native, making use of Deepgram and OpenAl APIs. This reduced time for making case records from hours to minutes.

Apr 2020 - Aug 2022

#### **Atlassian, Software Engineer (Infrastructure)**

Bengaluru

- Increased adoption of chaos engineering experiments by automating our 'war game' process.
- Propagated network turbulence using AWS SSM documents, working within framework of the company's internal PaaS.
- Handled high severity incidents as on-call roster for Jira Server → Cloud Migrations.

PATENT ℰ: Graph-based journey recorder for Confluence, built by a team of four

Stack: Golang, Java/Kotlin, Spring Boot, Splunk, SignalFX, DynamoDB, SQS, Chaos Toolkit

Oct 2019 - Mar 2020

## **Mothership,** Co-creator & Software Engineer *⊘*

Remote

Mothership is an open-source platform-as-a-service designed to democratize the process of building a PaaS. I built this in a team of three.

- · Programmatically provisioned servers on DigitalOcean with Docker Machine
- · Containerised applications for machine instances using cloud-native buildpacks

Read the case study for Mothership at https://mothership.live  ${\mathscr O}$ 

Stack: NodeJS, DigitalOcean, Docker, Docker Swarm, WebSockets, Heroku Buildpacks

Sep 2015 - Aug 2018

**Self Employed,** Architect ∂

Bengaluru

Collaborated with 'Disorient' camp to design spaces for Burning Man '17 & '18.

### **EDUCATION**

Jun 2022 - Dec 2023 Bradfield School of Computer Science, Computer Science Intensive program ∂

Aug 2009 - May 2015 School of Planning and Architecture, Bachelor of Architecture