

# Dhruv Bajaj

Software Developer | AI Engineer | Computer Science Engineer

Gurugram, Haryana, India

Phone: +91-9653060616 | Email: [dhruvbajaj2001@gmail.com](mailto:dhruvbajaj2001@gmail.com)

[LinkedIn](#) | [Github](#) | Website: [dhruvbajaj.tech](http://dhruvbajaj.tech)

## Professional Summary

Proficient software engineer with expertise in full-stack development, Cloud Infrastructure, and AI. Adept at designing scalable architectures and integrating advanced solutions. Experienced in team collaboration and mentoring, with a proven ability to adapt to new environments and technologies.

## Professional Experience

### Simcare (YC S24) | Founding Engineer | Remote, California, US | Feb 2025 – Present

- Founding engineer owning **end-to-end development across backend, frontend, DevOps, and cloud infrastructure** for a real-time AI healthcare platform.
- Built and scaled **FastAPI-based backend services**, real-time data pipelines, and production frontend interfaces; deployed and operated systems on **AWS** with CI/CD, monitoring, and observability.
- Led AI development including **training and integrating Vertex AI models**, LLM-powered workflows, and production inference pipelines with strong focus on reliability, security, and performance.

### Stack AI (YC W23) | Senior Backend Developer | Remote, California, US | Jul 2024 – Nov 2024

- Refactored and migrated React Flow-based backend nodes to a scalable input-output structure, replacing edge-based storage with node-based storage, optimizing data dependency and reducing runtime by 38%, significantly enhancing workflow performance and maintainability.
- Developed React Flow nodes to integrate Gmail and Outlook, building a scalable email infrastructure for sending emails and creating trigger nodes for workflows upon email receipt, optimizing automation and deliverability.
- Designed and implemented an in-house notification system for real-time updates, including alerts on token usage, with analytics to enhance user engagement and resource management.

### Artisan AI (YC W24) | Founding Engineer - Backend Developer | Remote, California, US | Oct 2023 – May 2024

- Designed and implemented a scalable backend architecture with FastAPI, PostgreSQL, and Redis, featuring secure user authentication, mailbox management, and campaign handling.
- Integrated third-party solutions, including Gmail and Outlook for mailbox management, NeverBounce to reduce bounce rates, SendGrid and SMTP services for efficient email delivery, Warmy.io for email warm-up, Maildoso for automated domain setup and mailbox creation, and Inframail for rapid inbox setup
- Built a robust email infrastructure for full-cycle sales campaigns, incorporating advanced scheduling algorithms to gradually scale deliverability for newly created mailboxes from 5 to 75 emails daily, ensuring each email is sent at 5-10 minute intervals aligned with lead time zones for optimal engagement.

### NatWest Group | Software Developer | Gurugram, Haryana | May 2023 – Oct 2023

- Contributed to scaling the Treasury Intraday Liquidity Management System (TILMS), saving \$100K monthly. Enhanced nostro account balance tracking, end-of-day summaries, and payment sweep functionality while leading platform migrations and integrating upstream data sources.
- Developed XCT and ISO adaptors to process 3M+ messages daily, implementing ETL pipelines from Kafka topics to IBM MQ, enabling seamless data integration into TILMS with secure SSL connections.
- Implemented Splunk dashboards with real-time alerts, automated GitLab pipelines for code quality and test builds, and spearheaded the system migration to AWS for improved scalability and efficiency.

## Education

- **SRM University** | BTech, Computer Science and Engineering | **2019 – 2023** | **9.5/10.0 CGPA**
- **Asia University (TW)** | Virtual Exchange Program, Digital Image Processing | **Spring 2022** | **95.4%**
- **CBSE** | Senior Secondary Education (Class 12th), STEM | **2019** | **90%**
- **CBSE** | Secondary School Education (Class 10th), Primary Education | **2017** | **10.0/10.0 CGPA**

## Awards

- Qualified GATE-CSE 2023 with an impressive AIR rank of 5000.
- Awarded a ₹55,000 performance-based scholarship for outstanding CGPA in the academic year 2021-22 at SRMIST.
- Recognized as a Top Mentor for the “Data Science” domain in GirlScript Winter of Contributing 2021 program.
- Secured first place in Techknow-2019, organized by the Department of Physics and Nanotechnology at SRMIST.

**Publications** : Published a research paper titled *IoT-Based Smart Irrigation System in Aquaponics Using Ensemble Machine Learning*, highlighting advancements in smart agriculture technologies.

## Skills

Backend Web Development, AI, LLM, Devops, AWS, Data Modeling, System Design, API Development, DBMS, ETL, Algorithms, CICD, Python, FastAPI, Django, Flask, SQL, SQLAlchemy, Postgres, MongoDB, Docker, Redis, Celery, Kafka, Javascript, React Js, Node Js, Java, C, C++, Bash