

# Prabhash Kumar

[GitHub](#) | [LinkedIn](#) | [binaryprabhash.dev@gmail.com](mailto:binaryprabhash.dev@gmail.com) | [+91 9166636455](#)

## SUMMARY

Full Stack Developer with experience building AI-powered multi-agent systems, scalable data platforms, and modern web applications. Skilled in designing end-to-end architectures combining LLM workflows, cloud data engineering, and high-performance frontend systems to enable intelligent data discovery and interactive analytics.

## EDUCATION

2020 - 2024 B.Tech at **IIT Bombay**

(CPI: 6.72)

## WORK EXPERIENCE

**1cell.ai — Full Stack Developer**

July 2024 – Present

- Spearheaded development of a **LLM-powered multi-agent discovery platform** for clinical and genomic datasets, using **LangGraph** for agent orchestration and **AWS Bedrock** models to translate natural language queries into SQL and dynamic D3 visualization configurations.
- Designed and implemented a **cloud-native data pipeline** using **AWS Glue** to migrate data from **PostgreSQL and MongoDB** into **Apache Iceberg tables on S3**, enabling scalable analytical querying through **AWS Athena**.
- Engineered backend services to support **interactive analytics dashboards**, generating dynamic queries and visualizations from structured biomedical datasets.
- Optimized performance of a legacy platform by implementing **server-side pagination, filtering, and sorting**, significantly improving load times for large datasets.
- Led frontend migration of the iManage application from Vue to Svelte, improving performance and maintainability.

## PROJECTS

### Minimal HTTP Server from Scratch (JavaScript)

- Built a lightweight HTTP server from scratch using **Node.js TCP sockets**, implementing raw HTTP request parsing, routing, header handling, and response generation without relying on frameworks like Express.
- Implemented support for core HTTP features including **request methods, status codes, static file serving**, and handling **multiple concurrent connections**, gaining a low-level understanding of the HTTP protocol and client-server communication.

### Movie Recommender System

- Developed a movie recommendation system using the **TMDB** dataset, applying NLP techniques such as **vectorization** and **cosine similarity** using **NLTK, Pandas, NumPy**, and **Scikit-Learn**.
- Built a local web interface using **Streamlit** integrated with the **TMDB API** to provide interactive recommendations based on movie similarity.

### Starbucks Customer Segmentation

- Processed and consolidated datasets with **300K+ records**, applying **PCA** for dimensionality reduction and **K-Means clustering** to identify meaningful customer segments.
- Used **t-SNE visualization** to analyze cluster structures and derive insights for targeted marketing strategies and customer behavior analysis.

## TECHNICAL SKILLS

<b>GenAI</b>	LangChain, LangGraph, RAG, Prompt Engineering, OpenAI Agents, Anthropic Agents, Gemini Agents, AWS Bedrock Agents
<b>DevOps &amp; CI/CD</b>	Docker, Kubernetes, Git, GitHub, Bitbucket, Jira, Jenkins
<b>AWS Services</b>	S3, EC2, Lambda, CloudWatch, Glue, Athena, Bedrock
<b>Programming</b>	TypeScript, Python, C++, SQL, REST APIs
<b>Frameworks</b>	Next.js, React, Svelte, Vue, Express, Django
<b>Databases</b>	PostgreSQL, MongoDB