

AKASH JAIN

Bhopal, India

+91-9301525184

akash.mbu32@gmail.com

[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

[LeetCode](#)

[dev.to](#)

EDUCATION

UIT RGPV University, Bhopal

Aug 2022 – June 2026

B.Tech - Computer Science and Engineering - **CGPA - 7.4**

Bhopal, India

Gyanodaya SMVM, Khurai

Apr 2020 – June 2021

Class XII (CBSE) — Science (Mathematics, Computer Science) - **Percentage - 93**

Khurai, India

EXPERIENCE

Technical Writer (Engineering)

Jan 2026 – Present

TakoVibe

Remote

- Authored first-principles engineering content focused on **FastAPI** and modern **Python backend architecture**.
- Explained limitations of synchronous frameworks and the role of **ASGI** and async execution.
- Emphasized execution models, type-driven design, validation, and architectural trade-offs over tutorials.

Software Engineering Project — Bookshelf Application

Jan 2026 - Feb 2026

Independent

Remote

- Developed a full-stack bookshelf application with **React 19**, **Vite**, **Django 5.0**, and **PostgreSQL 15** for library management.
- Implemented **JWT authentication**, search/filter functionality, **Google Books API integration**, and **RESTful** endpoints with ViewSets and Serializers.
- Containerized with **Docker** and docker-compose, featuring health checks, database migrations, and modern Python tooling (**uv**).

PROJECTS

Connect4 – Game Server [🔗](#) | [Reactjs](#), [FastAPI](#), [MongoDB](#), and [WebSocket](#)

2025

- Built real-time Connect4 server using [FastAPI](#) [WebSockets](#) with full game logic and winner detection.
- Designed scalable [MongoDB](#) backend with async [Motor](#) [WebSocket](#) updates for concurrent players.
- Reached 100% test coverage via 40+ [Pytest](#) cases for logic, validation, and state management.

Premium Predictor ML API [🔗](#) | [FastAPI](#), [Streamlit](#), [Scikit-learn](#), [Docker](#), [AWS EC2](#)

2026

- Built ML classification API with [FastAPI](#) and [Scikit-learn](#) to predict insurance premium categories, automating feature engineering for BMI, risk scores, and city tiers.
- Designed asynchronous [RESTful](#) API with [Pydantic](#) validation, delivering real-time predictions with confidence scores and probability distributions.
- Deployed Dockerized application on [AWS EC2](#) with health monitoring and developed [Streamlit](#) frontend for instant user predictions.

AI Tech Explainer with Persona-Driven Dialogues [🔗](#) | [Reactjs](#), [Flask](#), [SQLite](#), [Google Gemini](#)

2024

- Integrated [Google Gemini 2.5 Flash](#) via [Flask](#), utilizing dynamic prompt engineering to transform technical concepts into persona-driven dialogues.
- Implemented a look-aside caching strategy using [SQLite](#) and [SQLAlchemy](#), reducing API overhead by retrieving repeated queries from local persistence.

GMNX - Command-line Assistant [🔗](#) | [Docker](#), [Python](#), [Google Gemini](#),

2025

- CLI assistant powered by [Google Gemini](#) API for instant help and code snippets.
- Runs via [Docker](#) with zero setup; supports persistent alias for quick use.
- Containerized and secure: API keys passed at runtime; consistent experience across platforms.

TECHNICAL SKILLS

Languages: Python, JavaScript, C++

Frontend: React, Redux, HTML, CSS, TailwindCSS, Vite

Backend: Django, FastAPI, Flask, Pydantic, Node.js, Express.js

API & Communication: REST APIs, WebSockets, RabbitMQ, JWT

Databases & Caching: MongoDB, MySQL, PostgreSQL, SQLite, Redis, Mongoose

Cloud & DevOps: Docker, AWS EC2, Vercel, Render, Streamlit, Prometheus, GitHub Actions

Development Tools: Git/GitHub, Linux, Axios, npm, pnpm, Bun

Testing & Quality: Pytest, Postman

Architecture: Microservices Architecture

Problem Solving: 300+ problems solved across LeetCode, CodeForces, GeeksforGeeks, and CSES