AKASH KUMAR SINGH

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LinkedIn • GitHub • Leetcode • GeeksforGeeks

EDUCATION

IIIT Manipur	B.Tech, Computer Science and Engineering	8.23/10	*2022 - 2026*
PGSS School, Kushinagar	Class XII (CBSE)	95.4%	*2019 - 2021*
JNV, Kushinagar	Class X (CBSE)	97.4%	*2014 - 2019*

EXPERIENCE

- **Software Developer Intern**   **Truxie (Prayas Logistics)**   *05/2025 – Present*
  - Contributed to building scalable back-end services using **NestJS**, **TypeScript**, **PostgreSQL**, and **Docker**, and optimized database schemas and queries for improved performance.
  - Enhanced software reliability by maintaining comprehensive **unit** and **end-to-end tests** in **Jest**, boosting test coverage by **40%** and minimizing production issues.
  - Developed and integrated **50+ REST APIs**, collaborating with cross-functional teams to enhance performance, security, and scalability while following clean design patterns within an **Agile** environment.

SKILLS

Languages:	JavaScript, TypeScript, Python, C/C++
Frameworks & Libraries:	Node.js, Express, NestJS, Jest, React, FastAPI, PyTorch, Numpy, Pandas
Databases:	PostgreSQL, MongoDB, MySQL, Supabase
Cloud & DevOps:	Docker, AWS (EC2, VPC), CI/CD, Git, GitHub
Core Concepts:	OOPS, Operating Systems, DBMS, Computer Networks, Linux

PROJECTS

- **Semantic Book Recommender**   *Python, Hugging Face, LangChain, Gradio, ChromaDB, Transformers* ⌗ GitHub
  - Built a semantic book recommendation system using **Hugging Face embeddings** for vector-based search, **zero-shot classification** for genre labeling, and **sentiment analysis** for emotion detection on 7,000+ books.
  - Implemented **ChromaDB** vector store for efficient semantic search and developed an interactive **Gradio dashboard** for book discovery based on themes and emotional tone.

- **NeuroSonic Audio CNN**   *Pytorch, Numpy, Pandas, FastAPI, Docker, Python*   ⌗ GitHub
  - Developed and evaluated an environmental sound classifier using Mel Spectrograms and a ResNet-based CNN with preprocessing on the ESC-50 dataset, achieving **80%** classification accuracy.

- **SwiftChat**   *MongoDB, Express, React, Node.js, Socket.IO, PeerJS, Zustand*   ⌕ View   ⌗ GitHub
  - Built a real-time **communication platform** with **Socket.IO**-based messaging, **spaces** for organizing group conversations, and integrated **WebRTC** for video calling & group video streaming using CDN.
  - Implemented **user presence tracking** and managed global state using **Zustand** and **Tailwind** for a smooth and responsive user experience.

ACHIEVEMENTS

- Achieved 1631 LeetCode rating (top 19% globally) by solving 500+ DSA problems across LeetCode and GFG.
- Authored 300+ commits on GitHub, strengthening back-end systems, applying best practices in version control, and driving effective team collaboration.