

Yash Kumar

📍 Dehradun, India | ✉ yashkc2025@gmail.com | ☎ +91-895-421-2123 | in yashkc2025 | 🌐 yashkc2025

Full-stack developer with hands-on experience in Python, VueJS, SQL, and Kubernetes. Specializes in backend development, scalable web applications, cloud deployments, and RESTful API integration.

Education

BS in Data Science, Indian Institute of Technology Madras 2022 - 2026

- **Relevant Coursework:** Python, App Dev, Linux, Data Structures
- **Current CGPA:** 8/10

Experience

Full Stack Development and Data Science Intern, Cybermind Works January 2024 – May 2024

- Designed and developed core backend features for an end-to-end job posting platform.
- Implemented Kubernetes-based deployment for seamless operations and scalability.
- Developed internal team management software, leveraging data analysis resulting in optimised task assignments and improved workflow efficiency.
- Contributed to the development of semantic search functionality for an image library.
- *Tools Used:* TypeScript, NextJS, PostgreSQL

Leadership and Extracurricular Activities

Microsoft Learn Student Ambassador, Microsoft May 2024 – Present

- Conducted workshops on GitHub Actions and Linux migration.
- Contributed to open-source initiatives and technical advocacy as an Alpha Member (prior term).
- Led technical workshops and mentoring sessions on Microsoft technologies.

Projects

Houc [GitHub Link](#)

- Developed a full-stack platform connecting customers with service professionals for household services.
- Integrated analytics, user management, and account blocking/unblocking features.
- Implemented MVC architecture, along with JWT-based authentication.
- *Tools Used:* Python, Flask, VueJS, SQLAlchemy, SQLite

FlaskTunes [GitHub Link](#)

- Developed a Flask-based music streaming app where artists can upload music, and users can stream, create playlists, and share songs.
- Designed a role-based access system with artists, general users, and admins for content management and moderation.
- Implemented user authentication, content management, and interactive rating system with upvote/downvote functionality.
- *Tools Used:* Python, Flask, SQLite

Automated Flagellar Motor Detection in Cryo-ET [GitHub Link](#)

- Created an image analysis pipeline to detect flagellar motors in tomography images.
- Integrated machine learning and signal processing for precise localization and analysis.
- *Tools Used:* Python, Yolo, SciPy, Deep Learning, Torch
- *Outcome:* Enabled automated analysis of bacterial motility, contributing to microbiology research.

Technologies

Languages: TypeScript, Python, SQL, Bash, Java

Frameworks & Technologies: Vue.JS, Docker, React, SQLAlchemy, Kubernetes, Torch

Tools & Concepts: AWS, Redis, Celery, JWT Authentication, REST APIs, Microservices, CI/CD