Jayakeerthi

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</> https://leetcode.com/u/qgdHQ3aw8Q/

Skills

Languages: Python, C++, Java, JavaScript, TypeScript

Technologies & Tools: Pandas, Scikit-learn, Node.js, ReactJS, Docker, Kubernetes, Jenkins, Terraform

Frameworks: Django, Flask, AngularJS, React Native, Flutter

Areas of Expertise: Web Development, Machine Learning, Data Analysis, DevOps

App Development: Android and iOS applications using Flutter and React Native

Work Experience

Samsung R&D Institute, Bengaluru, India   June 2024 - August 2024
AI Research Intern

- Designed and implemented advanced vector search algorithms including **IVFPQ**, **HNSW**, and **LHS Flat Indexing**, tailored for high-speed retrieval.
- Optimized query processing time from **5 minutes to 20 ms** through efficient indexing strategies, memory optimization, and parallel computation pipelines.
- Compressed data storage and indexing size from **500 MB to 20 MB** for all implemented algorithms, significantly reducing memory footprint and improving scalability.
- Developed and integrated complete CRUD operations for each algorithm, ensuring ease of maintenance and extensibility.
- Collaborated with senior engineers to test, benchmark, and deploy the algorithms in a production-grade environment.

Medicloq Services Pvt. Ltd., Bengaluru, India
AI Software Developer

- Developed AI-based systems, including fall detection, face detection, and human activity recognition using camera feeds and AI models.
- Utilized state-of-the-art machine learning techniques to deliver robust solutions.
- Transitioned from Full Stack Developer to AI Developer within two months, showcasing versatility and technical growth.

Full Stack Developer

- Solved challenges such as mapping and validation for frontend and backend functionalities.
- Contributed to robust and scalable web solutions using modern frameworks.

Open Source Contributions

Google Summer of Code (GSoC) 2025 – AOSSIE   February 2025 - May 2025
Contributor

- Contributed to 9+ projects within AOSSIE, with 6+ merged pull requests.
- Optimized query processing pipeline, reducing execution time from **1 minute to 10 ms** using a redesigned system architecture and efficient pipeline design.
- Implemented authentication and authorization for secure access control.
- Built LLM-based data filtering and dynamic display mechanisms.

GirlScript Summer of Code (GSSoC)   September 2024 - Present
Contributor

- Contributed to over 30 open-source projects, ranking in the top 85 contributors.
- Collaborated with diverse teams to enhance technical skills and deliver impactful solutions.
- Engaged in discussions and code reviews, fostering a community-driven development process.

Hacktoberfest   September 2024 - Present
Individual Contributor

- Made 20+ pull requests, earning the highest-level badge.
- Enhanced user experience by improving documentation and implementing new features in open-source repositories.
- Collaborated with maintainers to resolve complex bugs and introduce innovative functionalities.

Education

Ramaiah Institute of Technology, Bengaluru   2023 - 2027
B.E. in Computer Science and Engineering (AI & ML)   *CGPA: 9.55/10*

Brilliant PU College, Hassan   2021 - 2023
Pre-University Education (Science)   *Percentile: 95%*
JEE Main Percentile: 96%   CET Rank: 1306

Projects

- **Medicare Solution (Ambulance, Pharmacy, Elder Care):** City-scale platform enabling instant **ambulance booking** via location, **online medicine ordering** from nearby pharmacies, and **home caretaker services** for elders to improve response in critical cases.
- **Meeting AI (AI-Powered Meeting Summarizer):** Built tabs for *Meetings* (schedule/conduct), *Query* (retrieve insights), and **AI summaries** for concise, structured notes with quick search over past discussions.
- **AI Model (Human Fall Detection & Face Recognition):** Implemented fall detection using OpenPose and face recognition with deep learning (Python, OpenCV) for real-time safety monitoring.
- **E-commerce Website (Angular & MERN stack & MySQL, React.js, Laravel):** Implemented product listings with filters, user/seller logins, shopping cart, instant search, and a responsive UI.
- **Nutrileno – AI-Powered Nutrition Guidance for Women's Health:** Personalized diet recommendations using **LLMs**, vector embeddings, and condition-aware prompts across life stages (age, pregnancy, menstrual health) to deliver science-backed nutrition advice.
- **DevOps & DSA Bootcamp (Combined):** Hands-on CI/CD with Jenkins, Docker, Kubernetes, AWS, and Terraform; mastered data structures/algorithms with weekly competitive coding assessments.
- **Event Management System (Django):** User registration, event creation, scheduling, ticket booking with payment integration, and responsive UI.
- **Stock Prediction Application:** Time-series based predictive analytics on historical stock data to forecast trends and support decision-making.

Awards and Achievements

- Ranked among the top 85 contributors in GSSoC 2024.
- Achieved maximum level badge for contributions during Hacktoberfest 2024.
- Successfully completed multiple DevOps projects utilizing Docker, Jenkins, and Terraform.
- Published technical blogs on advanced ML and web development topics.

Languages

- **English:** Proficient (Professional working proficiency)
- **French:** Intermediate