ROHIT KUMAR

Software Developer

SKILLS

- · Web Development: HTML, CSS, JavaScript
- Programming Languages & Frameworks: Python, Django, Django REST Framework (DRF), Django Channels, Kivy
- Tools & Technologies: WebSocket, Redis, Docker, Elasticsearch
- · Version Control & Databases: Git, GitHub, SQL

EXPERIENCE

07/2024 - Present

Cognizant — ING Group(Client)

Part of a core backend team building a scalable multilingual semantic search engine for enterprise documents spanning 6 countries.

- · Developed and maintained backend services to power document search with multilingual support.
- · Automated weekly ingestion of 10,000+ internal articles using Python scripts and scheduled workflows.
- Integrated NLP preprocessing pipeline for language detection and semantic embedding generation using MiniLM, enabling effective cross-lingual search.
- Planned and optimised Elasticsearch queries and vector indexing, improving semantic result relevance by 40% and reducing average response time to <500ms.
- Built scalable, modular RESTful APIs using DRF, enabling metadata filtering and user-preferred language-based results.
- · Implemented unit tests for key components to ensure stability and prevent regressions.
- · Followed Git-based workflows, code reviews, and CI practices for maintainable delivery.

Cognizant — EY(Client) 08/2023 - 04/2024

- Developed a chatbot backend enabling employees to query internal EY documents including FAQs, policies, and EY programs.
- Automated scraping of the EY internal portal to collect and preprocess 1000+ documents (PDF, Word, PPT).
- Extracted and chunked unstructured content using Python and PyMuPDF/docx2txt/python-pptx libraries.
- Generated high-quality semantic embedding using Open Al's text-embedding-ada-002, ensuring accurate contextual
 understanding.
- Integrated with Azure Al Search to store and retrieve vectored document data.
- Enabled conversational querying through a Django API with streaming response, achieving sub-second response times for 90% of queries.
- Delivered the end-to-end solution as a live demo for internal stakeholders, showcasing potential impact for 50K+ employees.

PROJECTS

Real-Time Chat Application (LINK)

- Enhanced real-time messaging app by integrating Redis with Django Channels and WebSockets, optimizing message delivery.
- Reduced message latency to under 100ms by leveraging Redis Pub/Sub, ensuring seamless real-time communication.
- Scaled concurrent connections by 3x, handling peak loads efficiently with Redis-backed WebSocket management.
- Achieved 100% secure authentication, preventing unauthorized access and ensuring data integrity.

Galaxy Runner Game (GitHub)

- Developed a Python/Kivy-based infinite-path game with dynamic road generation and adjustable speed, completing 90% of planned features.
- Tested locally for performance, ensuring frame rates above 60 FPS for smooth gameplay.
- Designed customizable difficulty to enhance user engagement by 40% in future playtesting.

Your-Desk (In Progress) (GitHub)

- Designed and implemented 60% of a scalable task management app inspired by Jira and Monday.com.
- Planned to support up to 500 concurrent users with features like team and one-to-one chat, skill-based task assignment, and notifications.
- Built RESTful APIs for real-time tracking of tasks and projects, aiming to improve task allocation efficiency by 30%.

A fun webapp (LINK)

· A fun, creative project that highlights your front-end and interactive design capabilities.

EDUCATION 2018 - 2022

Bachelor of Engineering in Electrical and Electronics Engineering

Sir M. Visvesvaraya Institute of Technology (VTU)

8.4 CGPA

ADDITIONAL INFORMATION

- · Certifications:
 - Docker For Developers
- Learning Focus: Distributed systems, Celery, Kafka, advanced system design
- Languages: English, Hindi