Dhilip S

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LinkedIn — GitHub — Portfolio — Medium — Uipath — Linktree

Experience

Developer Intern June 2023 – February 2024

Bejawar Innovative Technologies Hyderabad, India

- **AztrBot and AztraCore Development**: Created a real-time AI chatbot using GPT-4 and integrated multiple APIs, resulting in a 25% reduction in response time.

- **Integrated LLMs and Multiple APIs**: Improved query precision by 30% by merging LLMs such as Mistral and GPT-4 with various APIs.

- **LangChain for LLM-powered Development**: Utilized LangChain to streamline LLM-powered application development, reducing development time and boosting performance.

- **Implemented Aztracore Vector Database**: Deployed the Aztracore vector database to enhance query understanding and retrieval efficiency.

- **Designed Dynamic User Interface**: Crafted an engaging and user-friendly interface using HTML, CSS, JavaScript, and Flask to improve user experience.

Education

KGiSL Institute of Technology 2020 – 2024

B.E. Electronics and Communication Engineering (ECE) CGPA: 7.84

Vidyaa Vikas Matriculation Higher Secondary School 2018 – 2020

HSC (Higher Secondary Certificate) Percentage: 75%

Vidyaa Vikas Matriculation Higher Secondary School 2017 – 2018

SSLC (Secondary School Leaving Certificate) Percentage: 89.4%

Projects

Augmented Question-Answering System for Biomedical Literature Retrieval Using Language Models and PubMed Integration February 2024 – May 2024

Biomedical Literature Retrieval Using Language Models Team Lead

- **Keyword Generation and Article Retrieval**: Employed NLP models to create keywords for PubMed searches, extracting relevant biomedical articles. Leveraged LLMs to synthesize concise answers.

- **Data Storage and Deployment**: Stored interaction data in Firebase and launched the system with Streamlit, providing a user-friendly interface.

- **User Engagement**: Streamlit's interface facilitated intuitive interaction with the AI assistant for biomedical information retrieval.

Spelling Correction Bot April 2023

Automation and Language Processing Team Lead

- **ChatGPT Integration**: Leveraged OpenAI's ChatGPT API to detect and rectify spelling errors in text inputs via HTTP requests.

- **UiPath Automation**: Automated text processing tasks, such as converting multiline text to a single line and managing text input/output, using UiPath.

- **Excel Data Handling**: Streamlined text data processing by automating spell-checking and updating Excel files.

- **End-to-End Solution**: Enhanced spelling correction accuracy and efficiency through integrated AI and automation tools.

Open AI Chatbot January 2023 – February 2023

Natural Language Processing and Automation Individual

- **ChatGPT Integration**: Directed conversation logic using ChatGPT via HTTP requests.

- **UiPath Automation**: Automated JSON deserialization and data handling with UiPath.

- **Document Generation**: Streamlined conversion of ChatGPT responses from Word to PDF.

- **Efficient Workflow**: Facilitated easy PDF downloads, improving user interaction and document management.

Technical Skills

Programming Languages: Python, C, C++, HTML, CSS, SQL

Technologies: Machine Learning [Transformers, Torch], Artificial Intelligence (AI) [Generative AI], Frameworks[Langcahin, Haystack], Large Language Models (LLM) [GPT 4, Mistral], Natural Language Processing (NLP) [Text Classification (Technical and Non-Technical Classification), Sentiment Analysis (Positive and Negative Classification)], Retrieval-Augmented Generation (RAG), Flask, Firebase, Supabase, SQLite3, Robotic Process Automation (RPA), Linux, Cloud Deployment [Google Cloud Platform (GCP)], Vector Databases [Chroma DB], Git, GitHub, Internet of Things (IoT) [Arduino, ESP8266, ESP32, LoRa], Microsoft Office

Tools: Visual Studio Code, Python IDE, Google Colab, Kaggle, Uipath, Arduino IDE

Achievements

Hackathon Participation: Participated in Honeywell India Youth Teckathon - 2023 and HACK-A-BOT Hackathon - 2023.

Winner in UiPath Skill-A-Thon: Won the UiPath Citizen Developer SKILL-A-THON, 2022.

Media Publications: Published articles in leading newspapers like The Times of India on April 12, 2023, and The Hindu on March 21, 2023.

Top 2 in Mixed Signal SoC Design Marathon: Ranked Top 2 in Mixed Signal SoC Design Marathon Using eSim and SKY130, 2022.

Top 4 in Mixed Signal Circuit Design: Ranked Top 4 in Mixed Signal Circuit Design and Simulation Marathon Using eSim, 2022.

Certifications

Artificial Intelligence (AI) and Machine Learning (ML): Certified in ChatGPT for Everyone from Guvi, IBM AI Engineering, IBM AI Foundations for Business, Career Essentials in Generative AI by Microsoft and LinkedIn, AI for India 2.0 from Guvi.

Internet of Things (IOT): Licensed in IOT from Skill Lync and Coursera.

Networking: Accredited in Networking from Cisco Networking Academy.

Programming and Development: Certified in various programming languages and electronics courses through Coursera.

Robotic Process Automation (RPA): Endorsed in Robotic Process Automation (RPA) from UiPath.

Guinness World Record Participation: Part of the Guinness World Record Event "AI for India 1.0" from Guvi.

Publication

Title: Augmented Question-Answering System for Biomedical Literature Retrieval using Language Models and PubMed Integration

Journal: Published in the Indian Institute of Industrial Engineering Journal

Details: Volume 53, Issue 4, No. 6, April 2024, Pages 19-27

Focus: Developed an AI-driven question-answering system leveraging language models and PubMed for efficient biomedical literature retrieval

Recognition: UGC Care Approved, Group I Journal

Soft Skills

Communication: Effectively communicated with stakeholders during the development of AztrBot, ensuring requirements were clearly defined and understood.

Leadership: Led a team of 3 developers in delivering a real-time AI chatbot project on time and with a 20% performance boost in query processing.

Teamwork: Collaborated with cross-functional teams to integrate APIs and databases in multiple projects.

Time Management: Balanced academic work with internships, completing projects within tight deadlines.

Languages Known

English: Read/Speak/Write

Tamil: Read/Speak/Write