Aditya Paul

Kolkata, 700014
+918981108547
adityapaul2498@gmail.com
Date of birth: 24/04/1998
Nationality: Indian

Summary

- Computer Science Engineering Graduate with expertise in developing Generative and Agentic AI chatbots using Python. Demonstrated experience in RAG, code generation, and task-oriented agents utilizing LangChain or LangGraph, integrating seamlessly with databases, tools and APIs.
- Proficient in MVT/MVC(Model-View-Template, Model-View-Controller) and micro web frameworks like Django and Flask. Proficient in REST APIs and Celery with foundational knowledge in RabbitMQ, Docker and Kubernetes. Efficient in Pandas, Numpy and Matplotlib to perform data preprocessing and data visualization tasks.
- Strong frontend skills in HTML5, CSS3, and JavaScript including frameworks AJAX and jQuery, alongside database management in MySQL, PostgreSQL, and MongoDB.
- Expert in designing impactful web applications following either Monolithic or Microservices architecture

Experience

Niche Integrated Techno Solution Private Limited   March 2025 to Current
Python Developer
Kolkata, India

- Developed REST APIs in Python using Django and Flask frameworks.
  Generated user interfaces using Streamlit to enhance interactivity.
- Acquired SQL proficiency to comprehend functionality of Django Object Relational Mapping (ORM)
- Developed AI chatbot applications using Python, encompassing Retrieval-Augmented Generation and reasoning capabilities.
  Enhanced large language models with tools for tasks such as Wikipedia searches and SQL queries.
  Trained on techniques to finetune Large Language Models on custom datasets using Lamini
- Specialist in developing stateful, multi-actor and multi-modal chatbot applications using LangGraph tailored for various use cases
- Trained in Numpy, Pandas and Matplotlib to perform data preprocessing and data visualization tasks
- Utilised Git and GitHub for version control, ensuring code integrity.

Iotivity Communications Private Limited   August 2024 to November 2024
PHP Developer
Kolkata, India

- Developed REST APIs using CodeIgniter 3 and CodeIgniter 4 frameworks.
  Designed websites employing HTML5, CSS3, and Bootstrap for responsive layouts.
- Strong understanding of SQL to comprehend and interact with CodeIgniter Object-Relational Mapping (ORM).
- Develop code in JavaScript to render REST API response on front end employing AJAX functionalities.

Softech ERP Solution Private Limited   June 2024 to August 2024
PHP Developer Intern
Kolkata, India

- Develop website designs utilising Hypertext Markup Language 5, Cascading Style Sheets 3, and Bootstrap.
- Developed raw SQL queries to interact effectively with database using PHP.
  Wrote core PHP code to manage backend logic efficiently.
- Write code in JavaScript to render PHP response on front end using AJAX functionalities and employing jQuery for document object manipulation in front end

Projects

API-Integrated Business AI Chatbot*(Developed at Niche Integrated Techno Solution Private Limited):*

- Developed an **Multi-Agent AI-powered role-based chatbot** with dynamic access control to multiple internal tools, where each tool interacted with backend APIs to retrieve business-specific data.
- Designed a **centralized orchestrator agent** with modular handoffs to **specialized sub-agents** —each dedicated to a specific functional module for improved scalability and maintainability.

- Built the chatbot backend using **Flask** to expose APIs for seamless integration with frontend applications.
- **Tech Stack: Python, OpenAi Agents SDK, Flask, pydantic, MongoDB**

AI-Driven CV Enhancement System (*Developed at Niche Integrated Techno Solution Private Limited*):
- Engineered an automated CV-improvement system that leverages LLMs to generate refined, job-aligned resumes based on a candidate's original CV and a specific Job Description (JD).
- Designed a workflow where candidate CVs are parsed, cleaned, and pre-processed before being passed to a Large Language Model, which restructures content, enhances clarity, and rewrites experience bullets to match JD-specific skill requirements.
- Built the entire backend using Flask, integrating MongoDB storage and internal APIs to fetch job data, profile data, and return fully optimized CVs through a seamless API interface.
- **Tech Stack:** Python, Flask, OpenAI Agents SDK, pdf2docx/docx, MongoDB

AI-Based Candidate Profile Recommendation System using Large Language Models(*Developed at Niche Integrated Techno Solution Private Limited*):

Built an intelligent candidate recommendation system that leverages Large Language Models (LLMs) to accurately match job requirements with candidate profiles.

The system operates in two major stages:
- **Profile-to-Job Matching (Structured Data Matching):**
  Unified key information from job requirements—**Job Title**, **Required Experience**, and **Required Skills** —into a single standardized string.
  Similarly unified **Position**, **Experience**, and **Skills** fields from candidate profiles.
  Used a Large Language Model to compute an **accuracy score** between each job requirement string and candidate profile string.
  Candidates were ranked in descending order of match score.
- **Job Description-to-CV Matching (Unstructured Data Matching):**
  Processed and analyzed the **full Job Description** and compared it against the **entire CV text** of each candidate.
  Used an LLM to compute a semantic similarity score for each profile.
  Returned candidates in order of decreasing relevance score.
- **Tech Stack:** Python, Flask, MongoDB, PyMongo, pandas, NumPy, Large Language Models, OpenAI Agents SDK

Accounting Software(*Developed at Softech Erp Solutions Private Limited*):
- Developed an **accounting and inventory management system** to streamline company operations.
- Implemented **inventory management** module to track stock levels, add new items, and update details.
- Built **order management** system to pick items from inventory, generate packing lists (cartons), and track orders by ID or packing list.
- **Tech Stack: PHP, Ajax, JavaScript, jQuery, HTML, CSS**

Telecom Software System (*Maintained at Iotivity Communications Private Limited*):
- Implemented **search functionality** to retrieve customer records by IMEI and ICCID numbers after SIM registration.
- Enhanced **customer registration form** with additional fields, streamlining SIM activation for the operations team.
- Developed modules to display details of all **activated SIM cards**, accessible by customer ID or SIM card ID.
- **Tech Stack: Codeigniter 3, Ajax, Javascript, Jquery, Html, Css**

Website (*Developed at Softecth ERP Solutions Private Limited*):
- Built the **front-end interface** using HTML, CSS, and Bootstrap for pages including Home, About, Careers, and Products.
- Enhanced the **admin panel** with features to update homepage banners and modify content on About, Product and Contact pages.
- Improved content management flexibility, reducing dependency on developers for routine updates
- **Tech Stack: Php, Ajax, JavaScript, jQuery, Html, Css**

Skills

- Agentic AI
- Generative AI
- Python
- Numpy
- Pandas
- OpenAI Agents SDK
- LangChain
- Celery
- RabbitMQ
- REST API Development
- Hypertext Mark-up Language(HTML5)
- Cascading Style Sheets(CSS3)
- Bootstrap
- JavaScript

- LangGraph
- HuggingFace
- Django
- Flask

- Jquery
- Ajax
- Structured Query Language(SQL)
- Database Management System(DBMS)

Education

Institute of Engineering and Management   2020
Bachelor of Technology: **Computer Science and Engineering**
Kolkata, WB

- Learned theory subjects like Engineering Mathematics, Database Management Systems and Cyber Law and Security Policy as part of the curriculum
- Studied and practised practical subjects like Object Oriented Programming, Computer architechture and Datastructures and ALgorithms
- For the final year project a website for music streaming with features like pagination, comment forms, registration and login with Python, Django, Hypertext Markup Language 5, Cascading Style Sheets 3 and Bootstrap was built.

Patha Bhavan High School   2016
Higher Secondary: **Science**
Kolkata, WB
Learned subjects like Physics, Chemistry, Mathematic and Statistics. Also studied English and Bengali. Studied under West Bengal Council of Higher Secondary Education

South Point High School   2014
Secondary
Kolkata, WB
Learnt subjects like Physical Science, Life Science, Mathematics, History, Geography. Studied under West Bengal Board of Secondary Education.

Certifications

- Python Certification from HackerRank: https://www.hackerrank.com/certificates/0de35b128c47
- SQL Certification from HackerRank: https://www.hackerrank.com/certificates/ad36203aaec1
- JavaScript Certification from HackerRank: https://www.hackerrank.com/certificates/732c4aa94b96
- Software Engineer Certification from HackerRank: https://www.hackerrank.com/certificates/e64c35e7135b