Syed Muhammad Bahjat

Date of birth: 08/01/2001 **Gender:** Male **\Color: Phone number:** (+92) 3124663703

Email address: syedmbahjat848@gmail.com

WORK EXPERIENCE

Software developer

Homeeasy [01/05/2024 – Current]

City: Chicago | Country: United States

- **Technical Leadership:** Working as a **Technical Lead**, collaborating closely with **product and design teams** to align technical solutions with business goals.
- Scrum & Agile Management: Leading technical and scrum meetings, ensuring seamless coordination and project execution.
- Al Integration & Automation: Spearheaded the integration of Al into the communication system, enabling automatic client interaction, information gathering, and seamless response to client queries based on specific requirements.
- **Agentic System Development:** Innovatively designed and implemented an agentic system to replace traditional LLM-only models. Leveraged specialized agents for task planning, re-planning, and execution, improving task-specific reasoning and action-based responses. Optimized tool-based interactions for more accurate and efficient client handling.
- Outbound & Inbound Calling System: Designed, developed, and integrated a fully functional calling system using Retell and Bland for both outbound and inbound services, achieving a capacity of handling over 1,000 calls daily.
- **Al-Driven Client Interaction:** Customized Al models to handle automated calls, mimicking human responses to collect and analyze client requirements in real-time, enhancing efficiency and customer satisfaction.
- **Project Deployment:** Deployed various company projects on cloud platforms such as Heroku and Google Cloud Platform (GCP) Kubernetes, ensuring scalability and optimal performance.
- **Database Management (PostgreSQL):** Primarily used PostgreSQL to store, manage, and maintain client data. Developed and optimized complex database queries to ensure data integrity and efficiency. Implemented robust data handling processes for Al-driven communication and automated reporting.
- **Vendor Collaboration & Leadership:** Led meetings with key vendors including GCP, serving as a Lead Software Engineer, to strategize and enhance AI capabilities in projects, generating significant revenue streams.
- **Project Management & Optimization:** Managed and handled multiple AI-enhancement projects, continuously improving the system's interaction with clients and contributing to significant growth in company revenue.

Python Developer

Groomify [01/07/2023 - 27/09/2023]

City: Lahore | Country: Pakistan

- maintenance of computers
- relations with suppliers
- coaching a junior Ice Hockey team (10 hours/week)•Worked on Python/Django (DRF) to develop multiple Rest APIs for behavioural incentive project.
- Collaborated with other departments (Frontend, UI/UX).
- Implemented database models and optimized API performance for scalability.
- Integrated third-party services and implemented authentication mechanisms for secure API access.

Software developer

ChatDroid [01/06/2023 – 30/09/2023]

City: Lahore | Country: Pakistan

- •Worked on the most trending tech, Generative Al.
- Used langchain to benefit the most from OpenAI libraries.
- Applied multiple python libraries like Faiss, pandas, whisper etc and Streamlit for frontend.

- •Implemented JavaScript, jQuery, and HTML for frontend enhancements, ensuring seamless user experiences.
- Contributed to the enhancement of ChatDroid's capabilities through the integration and optimization of Generative Al technologies, ensuring efficient and dynamic conversational experiences.
- •Proficiently utilized Command Line Interface (CLI) for tasks including version control, package management, and environment setup, facilitating efficient software development workflows alongside Generative AI technologies

PROJECTS

[01/10/2024 - 21/12/2024]

3D Multiplayer FPS Game

- Designed and developed a **3D multiplayer first-person shooter (FPS) game**, creating an immersive game **wo rld** with detailed environments.
- Implemented **zombies as Al-driven enemies** that **attack player**, requiring survival through strategic movement and shooting mechanics.
- Developed player functionalities, including **shooting mechanics**, **animations**, **and collision detection** for realistic gameplay.
- Added **vehicle mechanics**, allowing players to sit and drive cars within the game environment.
- Enhanced multiplayer functionality for **engaging cooperative gameplay experiences**.

[10/06/2024 - 01/07/2024]

Al-Driven Calling System with Web Scraping

- Developed and implemented a full outbound and inbound calling system using **Bland** and **Retell AI** to automate client communications.
- Designed a **web scraper** using **Selenium** to extract phone numbers from required websites for outbound calling, ensuring the system could efficiently source contact data.
- **Challenge**: Encountered an issue where the scraper could not work without a GUI on certain websites, limiting the system's capability.
- **Solution**: Integrated a **VNC server within a Docker container** to simulate a GUI environment using a **Docker VNC image**, enabling successful scraping and maintaining automation efficiency.
- Optimized the system to handle **over 1,000 calls per day**, significantly improving operational efficiency and reducing manual intervention.

[01/06/2023 - 05/07/2023]

Restaurant Website - React & Django Project

Developed a dynamic food restaurant website using React for the frontend and Django for the backend, combining frontend interactivity with backend functionality for a seamless user experience.

Link: https://web-project-nine-alpha.vercel.app/

[01/01/2024 - 20/06/2024]

Smart Waiter Robot - FYP

Developing a cutting-edge Smart Waiter Robot for my Final Year Project, leveraging advanced technologies such as LiDAR and SLAM. Designed to enhance restaurant service, the robot autonomously delivers food to patrons, showcasing my expertise in robotics and innovative problem-solving.

EDUCATION AND TRAINING

Bachelors of Science in Computer Engineering

Comsats University Islamabad [01/09/2020 – 15/09/2024]

City: Lahore | Country: Pakistan | Website: https://lahore.comsats.edu.pk/default.aspx | Level in EQF: EQF level

DIGITAL SKILLS

Digital Skills - Test Results

	Information and data literacy	ADVANCED	Level 6 / 6
@# ##	Communication and collaboration	ADVANCED	Level 6 / 6
©	Digital content creation	ADVANCED	Level 6 / 6
Zm)	Safety	ADVANCED	Level 6 / 6
	Problem solving	ADVANCED	Level 6 / 6

Results from <u>self-assessment</u> based on <u>The Digital Competence Framework 2.1</u>

My Digital Skills

Python / Python FastAPI / Back-end (Flask, Django) / Langchain / CrewAI / PHIDATA / Programming Languages: Java, C, Kotlin, C#, C++,LINQ / Postman / Deploying with Streamlit / Async Workers (Celery, RQ) / VM Machine / GCP - Google Cloud Platform / Good understanding of Kubernetes / Cloud Scheduler / AI Agents / MySql, Postgres, Redis, RabbitMq / Agentic Framework / JavaScript / CSS / MySQL / HTML / Bootstrap / Agile (Scrum) / Linux / JSON / MongoDB / Social Media / SQL / PostgreSQL / Google Drive / Microsoft Office / Docker / Python Language - Basic knowledge / Rest-api / Git / Platform: AWS Cloud / Cloud&Container Platform: AWS, MS Azure, Google Cloud, Kubernetes, OpenShift, Docker, Rancher / Canva, Figma / UI/ UX / JSON/ XML / Docker, Jenkins, Openshift, Kubernetes, Microservices architectures design / Android SDK, Android Studio, Gradle / Agile Development / CI/CD with Jenkins

LANGUAGE SKILLS

Mother tongue(s): Urdu

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user