

AI & FULL STACK ENGINEER

#### **Details**

Cambridge, Cambridgeshire United Kingdom 07897819608 syedalihassan03@gmail.com

#### Links

linkedin

github

website

upwork

#### **Skills**

Angular

Python

React.Js, Nextjs and Vuejs

**React Native** 

Sprinklr

Django

SQL (Mysql, Postgresql and Sqlite)

FastApi

Node js

Javascript

TypeScript

Aws

HTML,CSS

Bootsrap and Jquery

NoSQL Databases MongoDB, Cassandra, Redis

PySpark

# **Profile**

Visionary AI & Full Stack Engineer with over 8 years of experience leading digital transformation through cutting-edge Gen AI, large language models (LLMs), and scalable full-stack solutions. Specialising in Retrieval-Augmented Generation (RAG), AI agents, and SaaS applications, I have deep expertise in Python, JavaScript, TypeScript, and modern database architectures, including vector databases like Pinecone and Weaviate. Passionate about AI-driven innovation, cloud-based architectures, and delivering high-performance solutions at scale.

# **Employment History**

# AI Engineer - LLM & RAG-Based Chatbot Development, 1 digit

OCTOBER 2024

Developed and optimized chatbots by fine-tuning large language models (LLMs) and integrating Retrieval-Augmented Generation (RAG) techniques to create data-rich, contextually accurate chatbots that cater to diverse user needs. Collaborated closely with cross-functional teams to ensure chatbot functionality aligned seamlessly with product goals, enhancing the overall user experience. Established testing frameworks and analysed key performance metrics to drive continuous improvements in chatbot accuracy, reliability, and engagement. Technical skills include Python, Flowise, TensorFlow, PyTorch, LangChain, LangSmith, LangGraph, Rasa, Hugging Face, vector databases, and embedding techniques.

# Lecturer part time, University College Dublin, Cambridge, Cambridgeshire

Full-Stack Web Development Instructor

Role: Delivering industry-relevant experiences and short courses to adult learners. Responsibilities: Conduct engaging lectures on full-stack web development, bridging theory with practical industry insights.

Teach key principles and techniques in web design.

Provide instruction on JavaScript, covering both fundamental and advanced topics. Educate learners on Python programming and its applications.

Explain database concepts, including SQL and CRUD operations.

Demonstrate the use of essential frameworks such as Django, Bootstrap, and Express.

Skills: Expertise in full-stack web development.

Proficiency in web design and development.

In-depth knowledge of JavaScript and Python.

Solid understanding of databases and SQL.

Hands-on experience with frameworks like Django, Bootstrap, and Express.

#### Cto and Full stack Developer, Appearl Ltd

JULY 2024 - OCTOBER 2024

As CTO and full-stack engineer, I lead the end-to-end development process, driving the successful rollout of new features and improvements. I spearhead the development of front-end features using Angular and Firebase, ensuring a seamless user experience. I am responsible for integrating new in-app features like chat systems and commenting, overseeing the MerMapp web platform's development and maintenance, and leveraging cloud technologies to ensure robust performance and security. Additionally, I guide the technical direction of the company, collaborate with cross-functional teams, and lead continuous improvement initiatives to enhance platform performance, scalability, and security.

# Full Stack Engineer, innex-ai, Cambridge, Cambridgeshire

JANUARY 2024 - APRIL 2024

At Innex AI, the candidate led the development of a full-stack application for the NHS using FastAPI. They focused on creating scalable APIs, efficient databases, and user-friendly interfaces. The candidate collaborated with teams to align projects with NHS objectives and managed the software development lifecycle.

#### **Key Skills and Experiences:**

• Proficiency in generative AI, particularly LangChain and Azure LLM.

Software Development Agile Management Scrum (Software Development) Leadership & Mentorship Artificial Intelligence Architecture Design Scikit-Learn **Test Automation** Express.js Machine Learning **TensorFlow** Kubernetes Automation and CI/CD **Application Programming** Interface (API) Generative Artificial Intelligence Docker (Software) **Data Pipelines** Natural language processing (NLP) Docker Terraform **Kubernetes and Containerization** Tailwind CSS Agile Scrum Agile Software Development **Jenkins** Git/GitHub/gitlab and **Project Management** 

JIRA

- Strong Python coding skills with experience in various frameworks.
- Full-stack development expertise with React, FastAPI, and Azure OpenAI.
- Cloud platform experience with AWS and Azure.
- Linux and scripting knowledge.

## Senior Software Engineer, Wildfish Limited, London

DECEMBER 2023 - FEBRUARY 2024

worked as a Senior Software Engineer at wildfish specializing in Python, Django, and back-end web applications. 5 years of commercial experience. Proficient in developing, testing, and deploying software solutions. Well-versed in front-end technologies, including JavaScript, HTML, and CSS. Skilled in writing automated tests with Pytest and working with PostgreSQL. Expertise in deploying applications to Cloud providers and CI/CD pipelines. Strong teamwork, communication, and problem-solving skills. Worked on open source projects like django dashboards

#### Lead Full Stack Python Developer, Quant Sports Trading Ltd, Cambridge

JUNE 2023 - NOVEMBER 2023

As a leader at Quant Sports Trading, I utilized Python and the Betfair Exchange API to innovate real-time data analytics and machine-learning-driven sports trading algorithms. I oversaw data flow, ensured database integrity, and engineered a robust order management system. A major accomplishment includes architecting a full-stack web app featuring a custom back-end, a sleek front-end, and a resilient database, delivering a seamless live betting experience. I have worked with Linus OS, shell scripting, and have setup AWS EC2 instances and made them production-ready. I also worked with LLM, algorithmic design, and trading strategies.

### Senior Application developer, be the business, London

FEBRUARY 2023 - MAY 2023

At Be the Business, I created tools to inspire leadership teams, enhance productivity, and offer resources for navigating challenges. Additionally, I drove productivity through cutting-edge solutions in cloud infrastructure, AI/ML innovation, and big data ecosystems, exceeding expectations in outcome delivery. My expertise includes data analysis and visualisation, Django, machine learning, React, Wagtail CMS, and TensorFlow.I have worked with Linux OS and shell scripting and have set up the development environment on the Linux system.I also used LM in the development of of tools Leadership skills evaluations

#### Senior Backend Engineer, Emperia, London

JUNE 2022 - DECEMBER 2022

As Emperia's lead backend developer, I utilize 3D technologies to enhance customer engagement, design frontend UI with React API integrations, and elevate online sales by 250%, particularly in the VR e-commerce space for brands like Dior and Lacoste. I also developed and designed strapi cms, imported products from the Dior salesforce system, and deployed them over 40 instances. My expertise in Fast-API, Python, and cutting-edge application architecture, coupled with my adept use of Terraform for Infrastructure as Code, ensures robust and innovative deployment processes. With a rich toolkit encompassing CI/CD, microservices, and data visualisation, I orchestrate backend symphonies, contributing significantly to our success. I have experience setting up a development environment on a Linux system and have done shell scripting as well.

# Full stack engineer, Reveall, Amsterdam

FEBRUARY 2022 - JUNE 2022

As a full-stack developer at Reveall, I drive the integration of responsive front-end design with scalable back-end solutions. Proficient in Python, REST API, React, Vue.js, databases, frameworks, AWS, Docker, and Terraform, I aim to deliver product features for short-term gains and strategic foresight. I have experience setting up a development environment on a Linux system and have done shell scripting as well. I have also used signals as a part of this project to implement an ongoing synchronous product discovery process in their SaaS application.

Data structures and algorithms
Object Oriented Programming
Code Review
Data Analysis
Quantum Computing
Continuous Learning
Azure Data Factory
Data visualization
Testing and Debugging
Problem Solving
Wagtail Cms
Technical Documentation
data science
web scraping
Microservices Architecture
Python Automation and Scripting
Skills Development
Microsoft Azure
Gcp
Firebase
Computer Vision
speech recognition
PyTorch
Al model development
ongoing research
Azure DevOps
Decision-making
Hadoop
Hive and Pig:

#### Ceo and Founder, elantratech

OCTOBER 2020

I founded my own company Elantratech in October 2020 and started providing services in field of ai and big data ,full stack development ,web development and mobile app development through it .I projects all over the world through my company and helped different businesses in their digital transformation journey .I also did projects in the field of machine learning and nlp and created ai based solution for companies and clients .

#### Senior web developer, Argontech, Lahore

MARCH 2020 - SEPTEMBER 2020

In my role at Argon Tech, I led web app development using Django REST framework and cloud-based services from AWS and Google. I'm skilled in authentication protocols like Auth0 and OAuth, along with payment systems such as Stripe and PayPal, improving user experiences. I excel at deploying web solutions securely and effectively, including Nginx deployment on Linux servers. Additionally, I have experience with Linux OS and shell scripting, setting up development environments on Linux systems.

# Python developer, Education Speedy, Lahore

SEPTEMBER 2019 - MARCH 2020

At Education Speedy, I served as a dedicated Python developer, crafting interactive web experiences with Django and flexible CMS platforms. Proficient in creating reliable APIs with Flask and expertise in PostgreSQL databases, I built data-driven applications. Spearheading AWS application deployment to the cloud, my innovative projects revolutionized the digital education industry with customized e-learning platforms. I have worked with Linux OS and shell scripting and have set up the development environment on the Linux system

# Freelance Senior Python Full Stack Developer and Al Engineer, Upwork , San Francisco

JANUARY 2017

Experienced AI Engineer and Full Stack Developer with a proven track record on Upwork since 2017, delivering high-quality projects in Generative AI, full-stack development, machine learning, and NLP. Specialized in building LLM-based chatbots using Retrieval-Augmented Generation (RAG) techniques, fine-tuning large language models (LLMs) for enhanced contextual accuracy, and developing data-driven AI applications. Successfully collaborated with diverse clients to design and deploy end-to-end solutions, optimizing user experiences and ensuring scalable, robust implementations.

**Key Skills & Technologies**: Python, FastAPI, TensorFlow, PyTorch, LangChain, LangSmith, React, Node.js, Firebase, Rasa, Hugging Face, vector databases, embeddings, cloud services (AWS, Azure).

# Education

# Masters in Artificial Intelligence and Big data, Anglia Ruskin University, Cambridge

SEPTEMBER 2021 - JANUARY 2023

My academic journey has been marked by a deep dive into neural networks, machine learning, and natural language processing at Anglia Ruskin University.

### BSC SOFTWARE ENGINEERING, University OF the Punjab, Lahore

SEPTEMBER 2016 - SEPTEMBER 2020

Software Engineering, PUCIT

I'm a University of the Punjab, PUCIT, alumnus who earned a Bachelor's in Software Engineering. I'm known for my collaborative spirit.

Distributed Systems	
Dataframes	
Containerization and Orchestration	
ETL Optimization	
Data Architecture Design	
Analytical and Problem-Solv Skills	ing
Team Collaboration	
Budgeting and Resource Allocation	
Data Warehousing	
Communication and Problen Solving	n
Critical Thinking	
NLP	
LLM	
Logistic Regression	
lstm	
numpy and pandas	
strapi	
Java	
android development	
app development	
Kafka	
llm	
langchain	
Openai	
Flowise	
Chatbot development	
Langsmith	

## Courses

Python for Algorithmic Thinking: Problem-Solving Skills, linkedin MAY 2023 – JUNE 2023

AWS Academy Graduate with a focus on Machine Learning Foundations, aws and credly

JANUARY 2022 - APRIL 2022

IELTS - English Proficiency Exam, Cambridge University Press & Assessment English

DECEMBER 2020

Python Django 2.x quiz Medium, Pentalog hr

SEPTEMBER 2021 - JANUARY 2022

web scrapping and API Fundamentals in Python , data science  $360\,$ 

JANUARY 2020 - APRIL 2020

build web app with reactjs, openclassroom and Facebook

JANUARY 2020 - APRIL 2020

# **Extra-curricular activities**

President pakistan society students union aru, Anglia Ruskin University, Cambridge, Cambridgeshire

AUGUST 2022 - DECEMBER 2022

As the President of the Pakistan Society Students Union at Anglia Ruskin University, I led a team in organising events and social activities for special occasions and student bodies. I orchestrated various events, quizzes, and games to facilitate student development and engagement within the ARU community.

Cricket player at madingley cricket club, Madingley cricket club, Cambridge, Cambridgeshire

JULY 2021

I played as an all-rounder for Madingley Cricket Club in league cricket for the past two seasons

#### President, Environment society pucit

FEBRUARY 2019 - FEBRUARY 2020

I worked as a president of the Pucit Environment Society, leading a company-wide regarding plantation drive across the campus and other activities to save the environment.

# Hobbies

Al engineer, coding enthusiast, and researcher Passionate about Al, blockchain, and cricket. Enjoys gym workouts, adventures, hikes, concerts, cooking, and singing.

# Languages

english
urdu
Hindi