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## Social Networks

in  
@muhammad-abdullah-090215212/  
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Stack Overflow

## Skills

**Python**

**Flask**

**Django**

**FastAPI**

**REST API**

**GraphQL API**

**HTML**

**CSS**

**Javascript**

**MySQL, PostgreSQL**

Stored Procedures,  
Views, Triggers

**NoSQL**

MongoDB, Amazon  
DynamoDB

**DevOps**

Deployment stages  
CI CD Pipelines

**AWS**

EC2, Elastic Beanstalk,  
Elastic Container  
Registry,  
S3, Lambda, Secret  
Manager, API Gateway,  
SQS, SNS, SAM, CLI

Muhammad Abdullah

## Web Developer

Web Developer adept at motivating myself. I have excellent coding and Analytics skills. In addition to my technical skills, I have excellent teamwork skills, which have helped me collaborate effectively with cross-functional teams and deliver high-quality projects on time

## Education

**Bachelor of Science: Computer Science**

From September 2017 to July 2021 [Bahria University Islamabad](#)

## Work Experience

**Senior Software Engineer**

Since April 2024 [True Meridian Islamabad, Pakistan](#)

Contributing to the backend development of the company's software projects, including experience with frameworks like Django, FastAPI, Large Language Models (LLMs) and decentralized knowledge graph platforms like Langchain

**Backend Lead**

From June 2023 to April 2024 [Codeaza Technologies Islamabad, Pakistan](#)

Led and managed a dedicated team of talented developers, guiding them to deliver exceptional results. My responsibilities included task allocation, project planning, and ensuring the successful execution of Python-based projects. Through effective leadership and coordination, I fostered a collaborative environment that encouraged innovation and productivity. I took pride in driving our team's success and achieving outstanding outcomes.

**Sr. Python Developer**

From June 2022 to June 2023 [Codeaza Technologies Islamabad, Pakistan](#)

I specialised in developing Flask Restful APIs and designing efficient databases. My role involved optimising code and database structures to enhance performance and scalability. I also gained extensive experience in deploying applications to the cloud services like Heroku, AWS, GCP and other VPS services, ensuring seamless and reliable operation. My work in this role allowed me to contribute to the creation of robust and scalable software solutions that met the evolving needs of our organization

**Jr. Python Developer**

From January 2022 to June 2022 [Codeaza Technologies Islamabad, Pakistan](#)

As a Junior Python Developer, I honed my skills in crafting robust and efficient REST APIs. My role was centered around creating scalable and high-performance Web applications, API solutions, contributing to the core functionality of our projects. Through this experience, I gained proficiency in Python programming and a deep understanding of API design principles, enabling me to play a crucial role in delivering impactful software solutions.

**Freelancing**

From August 2020 to December 2021 [Fiverr/Upwork Remote](#)

As a freelance web developer, I've had the privilege of translating creative visions into functional and visually appealing websites. With a focus on clean code and user-centered design, I've collaborated with diverse clients to bring their online projects to life. Whether it's building responsive layouts, optimizing site performance, or integrating cutting-edge technologies, I'm passionate about delivering top-notch web solutions that make a lasting impact.

**POS Software**

From August 2020 to September 2020 [Wrapsters Gujrat](#)

Developed a Tkinter-based POS software with sales and stock management, employing MySQL for data storage and DML for data manipulation. Effective client communication was maintained to ensure task accomplishment.

## Skills

### Azure DevOps

Functions  
Databases  
VMs

### GCP

Functions  
Databases  
Compute Engines

### Nginx

Nginx Reverse Proxy,  
Load Balancing

### Docker

Dockerfile, Images,  
Containers, Push and  
Pull Docker Hub  
Docker-Compose

### ELK

Elastic Search,  
Logstash, Kibana Stack

### Numpy, Pandas

### Git, GitHub

Pull Requests, GitHub  
Actions

## Soft Skills

### Research Abilities

### Problem Solving Ability

### Understanding Assumptions

### Collaborative

### Teamwork

## Languages

### English

### Urdu

### Panjabi

## Assets

### Ambition

### Patience

### Empathy

## Interests

### E-Sports

### Cricket

### Table Tennis

### Video Games

## Projects

**Instagram Comments Filtering:** Final Year Project, developed Chrome extension which hides the aggressive comments on [instagram.com](https://www.instagram.com) website in real-time using Custom API developed using TensorFlow, NLTK, NLP and Flask REST API.

**Sentimantle:** Flask REST API for a sentiment analysis project having complex database and queries. Authentication and authorization using JWT. Multiple features like Data addition via File Upload, File Download, Database Views and Stored Procedures. Like the project name says, Sentimantle, it creates a report of a certain aspect of a location and perform sentiment analysis on it's respective aspects.

**OCR AWS Lambda:** Developed a robust OCR solution in Python using AWS services like Lambda, S3, Docker, and ECR. The goal was to extract text from PDFs in S3 buckets for downstream processing. A Lambda function triggered by new PDF uploads used a custom Docker container in ECR with OCR libraries to extract text with high accuracy. The results were stored in another S3 bucket or integrated with other AWS services for further processing, all within an automated workflow, reducing manual intervention and processing time.

**AWS Lambda REST API:** Developed a Flask-based REST API and utilized AWS Lambda with Amazon API Gateway for deployment, all while seamlessly integrating a MySQL database. API had JWT authentication. This architecture resulted in a dynamic API that efficiently managed user interactions. By combining Flask flexibility with AWS Lambda serverless power and API Gateway management capabilities, I created a high-performance solution that showcased my skills in web development and cloud integration.

**Azure Functions REST API:** Designed and developed a robust system using Flask to create a RESTful API, seamlessly connected to a MySQL database. The unique aspect of this project was its integration with Azure Functions, enabling automatic scaling and event-driven execution. This combination of Flask, MySQL, and Azure Functions delivered a scalable, high-performing solution. The project showcased my expertise in web development and leveraging cloud services for enhanced functionality.

**Multi-Vendor Store:** REST API Having JWT authentication, invoice generation, images upload, transaction management like Daraz using Flask Restful Framework.

**WebSockets:** WebSocket connections to periodically send updates of data in database to clients, and sends immediate notifications whenever new data is added. It ensures only the latest request is processed by canceling any ongoing tasks before starting new ones.

**EKL:** Elastic Search implementation (Realtime fast searching) in Webapp on large MySQL database using EKL stack. EKL stack is also used by Google for searching. Elastic Search uses document type NoSQL database, to perform modern search and analytics engine which is based on Apache Lucene. It uses it's own indexing and mappings. After indexing, elasticsearch will create several inverted indices tables, which makes it super fast for searching. Developed logstash data pipeline to ingests data from MySQL, transforms it, and then send it to my ES Index.

**Snowflake:** Data warehousing, fetching and updating large data.

**Third-party API:** Integration of third party API's such as OpenAI, ShotStack, StoryBlocks in backend.

**CI/CD:** GitHub Action automates the Continuous Integration and Continuous Deployment (CI/CD) pipeline for deploying a Python application to an EC2 instance. It triggers on pushes to the main branch, sets up Python, configures SSH keys, and deploys the application to the specified EC2 host, updating it with the latest code from the repository. The action also sets up the necessary environment, database, and systemd service, and configures Nginx as a reverse proxy for the application.

**LocalAI:** Developed a local LLM chatbot API using LocalAI framework. LocalAI act as a drop-in replacement REST API that's compatible with OpenAI API specifications for local inferencing. It allows you to run LLMs, generate images, audio (and not only) locally or on-prem with consumer grade hardware, supporting multiple model families and architectures. I used a publicly available LLM on huggingface.