Muhammad Asad Ullah

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Professional Summary

Backend Developer with 1+ year of hands-on industry experience, skilled in designing and implementing scalable, performance-driven systems. Proficient in writing maintainable and efficient code, with expertise in Ruby on Rails and MERN. Recognized for academic achievements, including a silver medal and Dean's List honors. Driven to explore cutting-edge technologies like Large Language Models (LLMs) to craft innovative and ethical solutions.

Education

FAST National University of Computer & Emerging Science, B.S Computer Science

Sep, 2020 – Jun, 2024

GPA: 3.57

Relevant Coursework: Data Structures and Algorithm, Operating System, Software Design and Analysis, Database Systems, Web Programming, Information Security, Artificial Intelligence, Machine Learning, Data Science

Skills

Generative-AI: Llama, Python, Llama-CPP, Fine-Tuning LLM, Automation Bots

Data Science: Data Collection, Data Scraping, Data Annotation, Bulk, Grafana, PowerBI

Web Development: ROR, JavaScript, TypeScript, MERN, Next.JS, Sequelize, Redux, MongoDB, SQL, MySQL,

PostgreSQL, Firebase, MVC Architecture, RestAPI, Fast API, Scraping, Selenium, Git

Work Experience

Dubizzle Labs Lahore, Pakistan

Associate Software Engineer

Jun, 2024 - Ongoing

- Worked on scalable backend system of (Zameen & Bayut-SA), capable of handling 1 million + users.
- Contributed to critical features such as lead management systems and suspension flows, gaining expertise in writing scalable, performance-efficient, and maintainable code.
- Collaborated with cross-functional teams and third-party entities, enhancing communication and teamwork skills

GyroSol Pakistan

Backend Developer

Oct, 2023 – March, 2024

- Developed backend APIs and designed database schemas for modules like Employee Management and Shift Scheduling, Reports Generation and Payroll Management and Reports Generation.
- Demonstrated proficiency in full-stack development by contributing frontend support for state management, leveraging knowledge of Redux to enhance system performance and user experience.

Microslush Lahore, Pakistan

Summer Intern

Jul, 2022 - Sep, 2022

- Acquired Proficiency in React.JS, Node.JS, Redux, and Express.JS through hands-on learning during 3 months.
- Developed record management website for a school of 2000 students, tailored to the client need.

Selected Projects (github.com/asad-ullah321)

Echo-AI (Lead Backend Developer) Demo

Fast API, NEXT.js, Node.js, PSQL, Llama-CPP

• Developed a Gen-AI powered Social Media Content Generation to address the challenges of manual content creation and sharing in today's digital world by fine-tuning open-source LLMS for specific content generation.

Community Education System (Full Stack Developer) GitHub React, js, Node, js, Express, js, Mongo, Redux

• Developed a comprehensive management software for a community school, facilitating the transition from manual record-keeping to a streamlined digital solution capable of managing records for up to 2000 students.

DocAdvisor (Full Stack Developer) GitHub

React, Node, Express, MySQL

• Developed web-app to automate the process of appointment booking, benefiting both patients and doctors.

Algorithm Visualizer (Full Stack Developer) GitHub

Python, Networkx, Matplotlib, PyQT5

• A desktop application visualizing different AI algorithms to help understand the working of them step by step.

Awards & Honor

| FAST NUCES | Silver Medal for Fall 2021 | 2021 |
|------------|--|-------------|
| FAST NUCES | 4 Dean's List (Fall-2020, Fall 2021, Spring 2022, Fall 2022) | 2020 - 2022 |
| AKU-EB | Distinction Award for Computer Science | 2018 |

Leadership Experience

FAST-NUCES Pakistan

Teacher Assistant Feb, 2024 - May, 2024

- Assisted Dr. Rabia Maqsood (<u>rabia.maqsood@nu.edu.pk</u>) with the Artificial Intelligence course.
 Assisted over 40 students with their course content. Provided project feedback, assignment feedback and
- guidance

FAST-NUCES Pakistan

Teacher Assistant Sep, 2022 - Dec, 2022

- Assisted Dr. Muhammad Usama (<u>m.usama@nu.edu.pk</u>) with the Computer Organization and Assembly Language Course.
- Assisted over 80+ students with their course content. Provided project feedback, assignment feedback and guidance

FCAP (FAST-NUCES)

Pakistan

Head Technical Segment

Sep, 2022 – May 2022

- Led as the Tech Head in the university's computer society, FCAP, organizing and facilitating workshops while actively participating in coding initiatives.
- Organized and conducted coding training programs for society members, spanning a 2-months duration, contributing to skill development and fostering a collaborative learning environment.
- Played a part in the collective decision-making for the society, utilizing leadership skills to gently influence the direction and activities of the society.

Selected Blogs (medium.com/@asadullah321)

- Fine-Tuning Large Language Models to Replicate Scholarly Writing Styles: A Step-by-Step Guide (link)
- Beyond Manual Labor: Transforming Data Annotation with Large Language Models (link)
- Unveiling Cardiac Patterns: Exploring Arrhythmia with PCA Analysis (link)

Hobbies and Interests

• Tech Exploration

• Watching History Documentaries

Gaming