

Muhammad Ahmad Shafique

ahmadxhafique@gmail.com | github.com/ahmadshafique | ahmadshafique.me

Experience

Software Engineer, Arbisoft

Apr 2021 – Present

Python, Django, FastAPI, React

- Designed a content integration platform for client LMSs to provide a unified learning experience through SSO using Python and Lambda, leading to 400+ launches and generating \$50K revenue
- Achieved 5x reduction in AWS instance size by optimizing queries, tuning the query planner, and streamlining APIs and periodic tasks, significantly lowering infrastructure costs and improving system efficiency
- Built an authentication microservice in Django by using containerized deployments and DB versioning, enabling zero-downtime migration of 40K+ users and cutting AWS costs by 75%
- Trained an LLM on learner support requests using LangChain to automate responses, reducing tickets by 70% and saving over 25 hours of manual support per week while collaborating with stakeholders to deliver within a tight deadline
- Coded a custom module for grading Jupyter notebook submissions by leveraging Docker for isolated execution and auto-evaluation, streamlining assessments and saving 200+ hours per course assignment
- Saved survey SMS costs by at least 42% by developing a custom URL shortener service using Flask
- Integrated new payment gateways, boosting user satisfaction by 30% and achieving a 99% payment success rate
- Reduced local setup time and enhanced development experience by 75% by transitioning Devstack to Docker along with Makefile for easier interaction, E2E provisioning on Intel/ ARM architectures
- Decreased regression testing time for a microservice by 80% by increasing test coverage from 36% to 84%
- Integrated GTAG and FB Pixel in the checkout flow, boosting marketing effectiveness by 25% and conversion rates by 30%, while optimizing landing pages based on PageSpeed insights
- Led a squad of four developers within an Agile team to reduce bugs by 70% within two quarters by increasing code testability and cross-functional collaboration

Associate Software Engineer, Careaxiom

Nov 2020 – Apr 2021

Node.js, Express, AWS Personalize

- Implemented IP security restrictions in the core login module, allowing single logins and enhancing security
- Built a video recommendation system using AWS Personalize
- Contributed to the development of a voice product based on Amazon Alexa for senior citizens

Full Stack Software Engineer, Freelancer

Apr 2020 – Nov 2020

LinkedIn Engagement Automator | MongoDB, GraphQL, FastAPI, ReactJS

- Created a scraper for LinkedIn profile data and created actions for messaging, liking, and posting comments
- Utilized advanced Python scheduler to manage and run scraping jobs in the background efficiently.

Skills

Languages: Python, TypeScript, JavaScript, SQL

Frameworks/Libraries: Django, FastAPI, Node.js, Express, SQLAlchemy, Sequelize, React, Redux, Pytest, Jest, LangChain

Technologies: PostgreSQL, DynamoDB, PostGIS, Redis, Github Actions, Docker, Sentry, New Relic, AWS, GCP

Education

National University of Computer and Emerging Sciences

Lahore, Pakistan

BSc. Computer Science

Dean's List

2016 – 2020

Projects

AI-Powered Business Assistant | *Django, JavaScript, Artificial Intelligence*

- Developed a web-based virtual assistant to manage emails, redirect them to departments, and handle spam
- Added an automated appointment scheduling feature, streamlining the process for users