# Mohammad Shafay Joyo

+1-929-433-7408 | shafay11august@gmail.com | LinkedIn | GitHub

#### **Education**

Columbia University Sep 2023 - Feb 2025

Masters, Computer Science

- **GPA:** 3.5/4.0
- Coursework: Design for Generative AI, Databases, Cloud Computing and Machine Learning, Human Computer Interaction, Deep Learning for Computer Vision

NED University Oct 2019 - Aug 2023

Bachelors, Computer Science

- **GPA:** 3.7/4.0
- Coursework: Data Structures & Algorithms, Parallel and Distributed Computing, Operating Systems, Software Engineering

## **Technical Skills**

- Languages & Scripting: Python, JavaScript, TypeScript, Go, C++, Bash, HTML, CSS
- Frameworks & Tools: React.js, Tailwind CSS, WebSockets, Flask, Github, PowerPoint, Next.js, Node.js, Django, FastAPI, ASP.NET, PostMan, Jira, Microservices
- Cloud & DevOps: Docker, Kubernetes, Jenkins, AWS, GCP, Azure, RESTful API, Linux, CI/CD, PostgreSQL
- Data & Analytics: SQL, MongoDB, Pandas, Excel, Redis, LLMs, NoSQL, Vertex AI, Oracle
- Methodologies & Concepts: Agile Methodologies, Object-oriented Programming

## Work Experience

Consult America Inc.

Jun 2025 - Present

Software Engineer Intern

Ashburn, VA

- Developed full-stack features using Java, Spring Boot, and React, applying object-oriented programming principles to modernize legacy workflows and enhance customer-facing capabilities.
- Collaborated with QA, designers, and business analysts in fast-paced Agile sprints, aligning technical solutions with evolving business requirements and ensuring maintainable code quality.
- Authored, tested, and reviewed clean, maintainable code using Flask and Docker; integrated REST APIs and debugged issues to improve system stability and performance.
- Delivered new production features that reduced manual workflows by 30% and increased team sprint velocity achievement to 90%, demonstrating a commitment to technical excellence.

Nutanix Jun 2024 - Aug 2024

Member of Technical Staff Intern

San Jose, CA

- Engineered a realtime telemetry dashboard with React, TypeScript, ReactQuery, and WebSockets to centralize system health metrics.
- Optimized API payloads by 30% and reduced debug cycle times by 40% through streamlining data flows and enhancing UI rendering.
- Presented performance improvements to senior staff, leading to the companywide adoption of the dashboard within two months.

Columbia University Jan 2024 - Dec 2024

Graduate Teaching Assistant

New York, NY

- Guided students on projects involving CNNs, ViTs, GANs, and self-supervised learning, simplifying advanced concepts through labs and one-on-one support, resulting in improved student understanding
- Reviewed and optimized student Python/PyTorch code and UI for modelinspection tools, emphasizing readability and performance
- Raised average final project grades from 86% and increased students' confidence in debugging deep learning models, contributing to their academic success

# **Sapphire Consulting Services**

Sep 2021 - Oct 2021

Software Engineer Intern

Karachi, Pakistan

- Created responsive PHP/JavaScript forms with live validation to eliminate dataentry errors and streamline user workflows
- Optimized frontend/backend interactions and refined HTML/CSS layouts, improving pageload speed by 25%
- Enhanced user satisfaction scores by 20% through continuous UI/UX improvements and performance tuning

#### **Projects**

# NetGuard | Github

• Created NetGuard, a lightweight Dockerized tool for real-time packet sniffing using Python and Scapy

## **Distributed File System** | Github

• Developed using Python and Flask, emphasizing fault tolerance and high availability under node failures

# PurpleHire | Github

• Built PurpleHire Agent an AI-powered interview chatbot using Next.js, GPT40, to streamline hiring workflows

# RealTime Data Pipeline | Github

• Built a WebSocket server in Go with message history, notifications, and a clean UI

# SmartImageLabels | Github

• Built an automated image labeling tool using AWS Rekognition and S3 for object detection