

Mohammad Shafay Joyo

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Education

Columbia University

Masters, Computer Science

Sep 2023 - Feb 2025

- **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

Bachelors, Computer Science

Oct 2019 - Aug 2023

- **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

Work Experience

Consult America Inc.

Software Engineer Intern

Jun 2025 - Present

Ashburn, VA

- Developed and implemented full-stack features using Java, SpringBoot, and React to modernize legacy workflows and add new customer-facing capabilities, aligning solutions with business needs.
- Collaborated with QA, designers, and business analysts in fast-paced Agile sprints to refine software development life cycle practices and enhance team delivery.
- Wrote, tested, and reviewed clean, maintainable code with Flask and Docker, integrating REST APIs and utilizing Git for version control to improve system stability and performance.
- Delivered production features that reduced manual workflows by 30% and boosted sprint velocity to 90%, demonstrating effective problem-solving and teamwork.

Nutanix

Member of Technical Staff Intern

Jun 2024 - Aug 2024

San Jose, CA

- Engineered a real-time telemetry dashboard with React, TypeScript, ReactQuery, and WebSockets to centralize system health metrics, reflecting modern technology adoption.
- Optimized API payloads by 30% and reduced debug cycle times by 40% through streamlining data flows, showcasing proactive problem-solving and technical innovation.
- Presented performance improvements to senior staff, facilitating companywide adoption of the dashboard and demonstrating strong communication skills and effective cross-functional collaboration.

Columbia University

Graduate Teaching Assistant

Jan 2024 - Dec 2024

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

Software Engineer Intern

Sep 2021 - Oct 2021

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