

Sahu, Aman

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Professional Summary

Backend Software Engineer with 1 year of experience designing and deploying RESTful services using Python and Java. Strong background in automation, data pipelines, and cloud-hosted APIs. Proven ability to improve performance, reliability, and developer productivity in production systems.

Work Experience

Software Engineer Sept 2025 - Present

CloudFrame, Princeton, NJ

- Automated product installation using Bash, enabling offline and online provisioning across Linux distributions
- Enhanced vector search accuracy by 10% by implementing optimized GraphQL queries in Weaviate VectorDB
- Engineered new functionalities for a custom internal JDBC driver, maintaining a 15% benchmark advantage over IBM standards

Software Engineering Intern May 2025 - Aug 2025

CloudFrame, Princeton, NJ

- Built backend services supporting a RAG chatbot system using FastAPI endpoints
- Optimized vector processing pipeline by parallel document processing, improving API response time by 11%
- Designed batch-oriented data synchronization pipeline, implementing tree-based structures and hash-based delta detection system

IT Services Student Team Manager June 2022 - May 2025

Penn State IT Services, Middletown, PA

- Coordinated ServiceNow incident workflows supporting campus-wide IT management operations
- Mentored 10+ student technicians while supporting 250+ students and faculty throughout tenure
- Automated IT desk workflows using Bash scripts, reducing manual closing tasks and handoff errors

Full Stack Developer Intern April 2022 - Sept 2022

Swan Softech Pvt Ltd, Raipur, India

- Boosted file-tracking efficiency by 17% with a Python and Angular solution
- Worked on data migration, processing 5,000+ records to MySQL database via phpMyAdmin
- Ensured production readiness through 30+ unit tests, quickly identifying and resolving issues

Education

Pennsylvania State University Aug 2021 - May 2025

Bachelor of Science (B.S.), Computer Science

GPA: 3.4/4.0

Related Coursework: Data Structures, Formal Languages, Operating Systems, Algorithms and Analysis

Projects

NLP API Service

- Developed REST APIs supporting text-to-speech and speech-to-speech translation workloads
- Maintained 99.99% uptime on production EC2 instance handling processing requests

Skills

Languages: Python, Java

Frameworks: Flask, FastAPI, Spring Boot

Tools: Docker, Git, AWS (EC2, S3, SageMaker), REST APIs, Postman, Conda, Jenkins