Nitanshu Tak

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Education

UPES	Dehradun, Uttarakhand
B.Tech - CSE with a specialization in CCVT	Aug 2023 - May 2027
	CGPA- 8.2 (till now)

Experience

Software Development Intern – The Waiter Company
Jun–Jul | 2025 | Remote
- Engineered core dashboard features (Sidebar, Reports, Inventory, Notifications) using React, TypeScript, Next.js, Tailwind, powering daily operations.
- Architected scalable routing & reusable components, improving navigation flow and reducing dev overhead.
- Delivered analytics & inventory modules that replaced manual processes with real-time, interactive dashboards.
- Converted Figma designs into production-ready UIs, ensuring seamless UX across modules.
- Resolved hundreds of UI/UX bugs through deep debugging and performance tuning, boosting platform stability.

Projects

TransparaScore-A Hackathon Machine Learning Explainable Credit Intelligence Platform
TechStack: Python, Streamlit, Pandas, NumPy, Scikit-learn, SHAP, APIs (YahooFinance, FRED, World Bank, GDELT, Reuters), Streamlit Cloud

- Built a real-time credit risk assessment app integrating financial, macroeconomic, and event-driven datasets, working with 5 APIs.
- Applied Gradient Boosted Trees (ML) with SHAP explainability, ensuring transparent and interpretable risk scoring.
- Designed an interactive Streamlit dashboard with visualizations, insights, and CSV exports, enabling data-driven decision-making.
- Deployed live on Streamlit Cloud, ensuring scalability, reliability, and accessibility for end users.

AWS InfraControl-Command Line Based EC2 Life cycle Utility
Tech Stack: Python Boto3, AWS CLI, IAM, EC2, Lambda, S3, SNS

- Designed a CLI-based system to start, stop, and terminate multiple EC2 instances on demand, scaling seamlessly from a single instance to dozens simultaneously.
- Implemented IAM-based secure access control, ensuring role-based permissions for infrastructure operations.
- Automated provisioning for 20+ EC2 instances, added logging and monitoring by integrating S3 (activity logs), Lambda (scheduled tasks), and SNS (real-time alerts) for operational reliability.
- Delivered a lightweight, UI-less automation tool that reduced manual provisioning time by ~70% and strengthened confidence in infrastructure-as-code principles.

ExpenseFlow- A GUI Based Budget Tracker
Tech Stack: Java, Swing, OOPs, Collections, File I/O

- Developed a Java Swing–based finance manager with modular OOP architecture for scalability and maintainability.
- Built a real-time login & user database with persistent storage using Collections and File I/O, enabling secure multi-user access.
- Integrated expense splitting, balance tracking, and real-time updates to improve usability for group expense management.
- Enhanced system reliability with exception handling, robust data validation, and responsive GUI design.
- Tested with 50+ users across real-world scenarios to validate adaptability and reliability.

Technical Skills

Languages: C, C++, Python, Java, HTML, CSS, Typescript, NextJS, ReactJS
Cloud Tools: AWS GUI, AWS on CLI
Concepts & Frameworks: OOPs, Java Swing, File I/O, Collections, Exception Handling
Databases: MySQL, MongoDB, PostgreSQL
Tools: Git, GitHub, Command Line, Visual Studio Code, Google Colab, Cisco Packet Tracer
Coursework: Data Structures & Algorithms, Database Management Systems, Operating Systems, Computer Organization & Architecture, OOPs, Data Communication & Networks, Software Engineering.

Certifications

AWS Certified Cloud Practitioner – Certification Course | Online | Aug- 2025
- Completed foundational training in cloud concepts, security, architecture, and services with hands-on labs in EC2, S3, IAM, and CloudWatch.

AWS Academy Cloud Foundations - Online | Apr-2025
- Earned globally recognized certification validating skills in AWS global infrastructure, cost optimization, governance, and real-world cloud deployments.