

Nitanshu Tak

+91 8619698484 | Nitanshu@gmail | linkdin.com/Nitanshu | github.com/Nitanshu

Education

University of Petroleum and Energy Studies (UPES)	Dehradun, Uttarakhand
BTech – Computer Science & Engineering (Cloud Computing and Virtualization Technology)	Aug 2023 - May 2027

Experience

Software Development Intern – The Waiter Company
Jun–Jul | 2025 | Remote

- Built major **frontend components and pages** for an internal dashboard using **React, TypeScript, and Next.js**.
- Designed reusable components like Sidebar, Navbar, and dynamic pages using **Tailwind CSS and modular architecture**.
- Collaborated in **Agile sprints** and contributed to **UI bug fixes and performance optimization**.
- Implemented **API integration, routing, and state management** in real-world projects.

Projects

TransparaScore-My-Hackathon-Explainable-Credit-Intelligence-Platform

Tech Stack: Python, Streamlit, Pandas, NumPy, Scikit-learn, SHAP, APIs (Yahoo Finance, FRED, World Bank, GDELT, Reuters), Streamlit Cloud

- Built a web app to assess creditworthiness using real-time financial, macroeconomic, and event-driven data.
- Applied **ML** (Gradient Boosted Trees + SHAP) for explainability and transparent factor contribution analysis.
- Designed an interactive **Streamlit** dashboard with scoring visualization, insights, and CSV export.
- Deployed live on **Streamlit Cloud** and submitted to **CredTech Hackathon @ IIT Kanpur**.

AWS InfraControl:Command-LineBasedEC2LifecycleUtility

Tech Stack: Python Boto3, AWS CLI, IAM, EC2, Lambda, S3, SNS

- Designed and deployed a **terminal-based** system to control **AWS EC2 instances**—start, stop, and terminate; entirely through the command line.
- Used **IAM** for secure access control, **S3** for logging instance activity, and **Lambda** to automate periodic tasks.
- **SNS** was integrated to send alerts on key events.
- The project was built as part of a cloud computing module to get hands-on experience with **real-world AWS workflows**.
- It helped build confidence in **infrastructure management and cloud automation** using minimal **UI**.

ExpenseFlow: A GUI-Based Budget Tracker

Tech Stack: Java, Swing, OOPs, Collections, File I/O

- Built a desktop application to manage personal finances with a **Swing GUI**.
- Applied **OOP principles** (inheritance, polymorphism, encapsulation, abstraction) for clean, modular code.
- Used Collections for efficient data handling and **File I/O** for persistent data storage.
- Made a real-time **database** for all the logins and their user information.
- Integrated features like **expense splitting** and real-time balance updates.
- Strengthened skills in GUI design, exception handling, and real-time **data management**.

Technical Skills

Languages: C, C++, Python, Java, HTML, CSS, Typescript, NextJS, ReactJS

Cloud Tools: AWS (EC2, IAM, Lambda, S3, SNS, CloudWatch), AWS 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, pricing, and AWS architecture.
- Hands-on exposure to key AWS services like EC2, S3, IAM, and RDS.
- Prepared for the AWS Certified Cloud Practitioner exam with guided labs and practice tests.

AWS Academy Cloud Foundations - Online | Apr-2025

- Completed the AWS Academy program, gaining foundational knowledge in cloud computing and AWS services.
- Successfully demonstrated the ability to design, deploy, and manage AWS solutions, preparing for real-world cloud applications.