

Nitanshu Tak

8619698484 | Nitanshu@gmail | [linkedin.com/Nitanshu](https://www.linkedin.com/Nitanshu) | github.com/Nitanshu

Introduction

Third-year BTech CSE student specializing in **Cloud Computing**, with practical experience in **frontend development and cloud infrastructure**. Recently completed an industry internship building production-grade dashboards using **React, TypeScript, and Next.js**. Passionate about integrating cloud automation with **real-world systems**, while also **exploring AI/ML and Data Science**. Actively developing a strong technical foundation through hands-on projects, internships, and consistent skill-building.

Education

University of Petroleum and Energy Studies (UPES)

Dehradun, Uttarakhand

BTech – Computer Science & Engineering (Cloud Computing and Virtualization Technology)

August 2023 - May 2027

Experience

Software Development Intern – The Waiter Company

June–July (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.

Certifications

Amazon Web Services (**AWS**) - online [April-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.

Projects

AWS InfraControl: Command-Line Based EC2 Lifecycle Utility

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.
- Implemented **multithreading** to handle concurrent user inputs and processes.
- 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

Cloud Tools: AWS (EC2, IAM, Lambda, S3, SNS, CloudWatch), AWS CLI

Concepts & Frameworks: OOPs, Java Swing, File I/O, Collections, Exception Handling

Databases: SQL, MongoDB

Tools: Git, GitHub, Command Line, VS Code, Google Colab, Cisco Packet Tracer

Coursework

Data Structures & Algorithms, Database Management Systems, Operating Systems, Computer Organization & Architecture, OOPs, Data Communication & Networks, Software Engineering.