

Devatva Rachit

Profile

Final-year Computer Science Engineering student with a strong foundation in software development and applied machine learning. Experienced in building scalable backend systems, deploying intelligent solutions, and working with cloud-based infrastructures.

- Programming Languages: C, Java, Python, SQL
- Backend Development: Spring Framework, Spring Boot, REST APIs, JDBC, Hibernate
- Data Science Libraries: NumPy, Pandas, Matplotlib, Seaborn
- Machine Learning: Scikit-learn, TensorFlow, Supervised learning, Deep learning, Model tuning
- Tools and Methodologies: Jupyter Notebook, DBMS, OOP, Agile, Scrum, Git
- **Problem Solving:** Solved 400+ data structure and algorithm problems on **LeetCode**, enhancing algorithmic thinking and coding efficiency

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech., CSE	KIIT University, Bhubaneswar	9.05	2026
12th	City Montessori School (ISC), Lucknow	93.5	2021
10th	City Montessori School (ICSE), Lucknow	93.67	2019

Certifications

A I S MI Postcomp IIdomy	2024
• AI & ML Bootcamp – Udemy	2024
IBM Data Science Certification	2025
• Red Hat Enterprise Linux Beginner (RHEL124)	2025
AWS Cloud Computing and Solution Architect Beginner	2025

Projects

Credit Card Fraud Detection | Python, Pandas, Numpy, Scikit-learn, Jupyter Notebook

- Developed a fraud detection system using **Logistic Regression**, **Decision Tree**, KNN, SVM, Random Forest, and XGBoost on a dataset of **284,807 transactions**.
- Handled extreme class imbalance (<0.2% fraud cases) using undersampling, enhancing model fairness and recall.
- Achieved 96.23% test accuracy with RandomForestClassifier, with ROC-AUC > 0.95 across top models.

School Management REST API | Java, Spring Boot, PostgreSQL, Spring Data JPA, Postman

- Developed a RESTful backend system for managing school and student data using Spring Boot and PostgreSQL.
- Implemented modular architecture with **Controller-Service-Repository layers** and integrated **Spring Data JPA** for robust CRUD operations.
- Designed and tested **15+ REST API endpoints** with Postman, following REST conventions to ensure scalability and frontend compatibility.

MNIST Digit Classification using CNN | Python, TensorFlow/Keras, NumPy, Matplotlib

- Built a deep learning model for handwritten digit classification on the MNIST dataset with 96.80% test accuracy.
- Trained on 60,000 images and validated on 10,000 test samples using CNN architecture.
- Applied techniques like **dropout**, **batch normalization**, and **ReLU activations** to improve performance and prevent overfitting. **CareFlow Healthcare Management API** | *Java, Spring Boot, PostgreSQL, Spring Data JPA, Docker*
- Developed a RESTful backend managing 500+ patient records with Controller-Service-Repository architecture and Spring Data JPA.
- Containerized with **Docker** and implemented **unit (100% coverage) and integration testing**, ensuring robust, production-ready APIs.
- Designed 15+ scalable REST API endpoints following best practices, enabling seamless integration with frontend applications and supporting future feature expansion.

Achievements

- Ranked in the top 25% globally on **LeetCode**, with 400+ problems solved across algorithms, data structures, and system design.
- Contributed to open-source ML projects, refining algorithms and performance.