

# Shubashis Mete

+91 93300 91339 | shubashismete@gmail.com | www.linkedin.com/in/shubashis-mete-909253231 |  
<https://github.com/suvomx1999> | <https://shubashismeteporfolio.vercel.app/>

## EDUCATION

### SRM Institute of Science and Technology

B. Tech Computer Science

Chennai, TN

Jun. 2023 – May 2027

### Douglas Memorial Higher Secondary School

Higher Secondary Certificate

Kolkata, WB

## PROJECTS

### AI Tutor | DQN, Gymnasium Simulator, Pytorch, NLP, REST API

November 2025 – Present

- Designed and trained a **Deep Q-Network (DQN)** to personalize learning paths based on student performance and engagement signals.
- Created a custom reinforcement learning environment using **Gymnasium** modeling the rewards and learning fatigue.
- Deployed an end-to-end ML pipeline with **REST-based inference** and real-time visualization using **Streamlit**.

### Pneumonia Detection | DenseNet121, Grad-CAM, Streamlit, CNN, Git

November 2025 – Present

- Designed an end-to-end deep learning pipeline to detect pneumonia from chest X-ray images using CNN and transfer learning, including data preprocessing, augmentation, training, and evaluation.
- Implemented model evaluation and explainability using accuracy metrics, confusion matrix, and Grad-CAM visualizations to interpret regions influencing predictions.
- Deployed the trained model through a production-ready interface (Streamlit / REST API) enabling real-time inference, demonstrating practical applicability in healthcare AI systems.

### YouTube Clone | React.js, Node.js, Express, YouTube API

July 2025 – September 2025

- Developed a full-stack YouTube clone with search, video playback, and subscription features using **React.js** for frontend and **Node.js/Express** for backend.
- Integrated the **YouTube API** to fetch and display videos dynamically based on user queries.
- Implemented responsive UI and state management for a smooth user experience across devices.

### Student Management System | Spring Boot, JPA, MySQL, REST API, Docker

August 2024 – October 2024

- Built a full-stack student management platform with CRUD operations for students, courses, and enrollments using **Spring Boot** and **REST APIs**.
- Managed database persistence using **JPA/Hibernate** with **MySQL**, ensuring data integrity and optimizing queries.
- Containerized backend using **Docker** and deployed the application for cloud-based access.

## EXTRA-CURRICULAR ACTIVITIES

### Smart India Hackathon Participant

India

Hackathon on AI / Development

2025

- Collaborated in a team to design and develop a functional prototype within a 24–48 hour time constraint.
- Applied problem-solving skills, rapid prototyping, and real-time debugging under competitive conditions.
- Was among the top 40 Teams of the Institution and selected for SIH Final round Submission

## TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript, HTML, TypeScript, SQL, C++

**Frameworks:** Spring Boot, React.js, Node.js, REST API

**Developer Tools:** Git, Docker, Postman, Streamlit, Jupyter Notebook

**Libraries:** NumPy, Pandas, Scikit-learn, TensorFlow, Matplotlib

**Databases:** MySQL, MongoDB

## CERTIFICATIONS

### NPTEL | Introduction to Machine Learning- IITKGP

Valid Through 2025

### NPTEL | Database Management System

Valid Through 2025

### Coursera | Divide and Conquer, Sorting and Searching, and Randomized Algorithms

Valid Through 2022