PRATEEK KUMAR

Indian Institute of Technology, Jodhpur

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○ **GitHub**

PROJECTS

Landmine Detection System
Dr. Sudipto Mukhopadhyay

📍 IoT, Sensors, Raspberry, Python

- **Developed a Landmine Detection System:** Developed a landmine detection system using a Raspberry Pi and an IR thermal sensor to identify potential landmines. Enabled integration with various devices for real-time detection and monitoring within the same network.
- Implemented an interface for viewing and analysing sensor data on any device connected to the same network, enhancing safety and efficiency in mine detection operations.

Heart Failure Detection Model
Dr. Avinash Sharma | GitHub Link

📍 Python, Numpy, Pandas, Tkinter, Random Forest

- Developed and optimized a machine learning model to predict heart failure using patient health data, including features such as age, sex, chest pain type, resting blood pressure, cholesterol levels, fasting blood sugar, resting ECG results, maximum heart rate, exercise-induced angina, oldpeak (ST depression), and ST slope.
- Deployed the model with a user-friendly GUI built using Tkinter, allowing healthcare professionals to input patient data and receive immediate predictions, enhancing early detection and treatment.

Student Management System
Dr. Suchetana Chakraborty | GitHub Link

📍 C++, DSA, BST,User Authentication, File Handling

- Developed a comprehensive Student Management System using C++ to efficiently manage student data, including adding, modifying, deleting, and viewing student information. The system includes user authentication to ensure secure access.
- The system employs a binary search tree (BST) for efficient data management and retrieval. It features robust input/output operations, data validation, and user-friendly interfaces for managing student records.

EDUCATION

Bachelor of Technology
Indian Institute of Technology, Jodhpur

📅 July 2022 – July 2026   **CGPA : 6.62**

Class XII
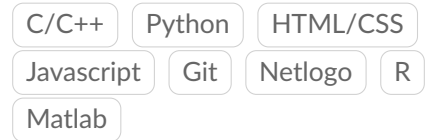**New Rajasthan Public School**

📅 June 2021   87.00%

Class X
Godavribai Ramdev Podar Public School

📅 June 2019   91.00%

SKILLS

C/C++   Python   HTML/CSS
Javascript   Git   Netlogo   R
Matlab

COURSEWORK

- Data Structures and Algorithms
- Introduction to Machine Learning
- Linear Algebra and Calculus
- Probability, Statistics and Stochastic Processes
- Introduction to Computer Science
- Modelling and Simulation
- Internet of things
- Design and Analysis of Experiments

RESPONSIBILITIES

- Student Guide - Student Wellbeing Committee, IIT Jodhpur.
- Assistant Head - Varchas'23, Sports fest, IIT Jodhpur.

ACHIEVEMENTS

- Exhibited Landmine detection System project in **DRDO**(Defence Research and Development Organisation)exhibition.
- Was a part of the organising team of the 2023 batch **Orientation**.