Deepak Kumar Raj

📞 +91-8757900520 ✉ deepakraj33333@gmail.com 🔗 LinkedIn 🔗 GitHub 📊 Codeforces 🔗 LeetCode

EDUCATION

UIET, Panjab University, Chandigarh   **2021 − 2025**
B.E - Computer Science and Engineering - **CGPA - 6.34**   *Chandigarh, India*

COURSEWORK / SKILLS

- Data Structures & Algorithms
- Computer Network & Security
- Database Management System (DBMS)
- Web Development
- Artificial Intelligence
- Operating Systems
- OOPS Concept
- Software Engineering

PROJECTS

Diabetic Retinopathy-Preprocessing & Classification ☑ | *Python, Scikit-Learn, Tensorflow*   **Jul 2023**
- Preprocessed and augmented the IDRiD dataset (413 retinal images) from IEEE DataPort, expanding it to **2,857 images**
- Employed the **InceptionResNetV2 model** for classification tasks on the augmented dataset
- Achieved an accuracy of **78.48%** on the testing dataset, demonstrating effective model performance.

House Price Predictor ☑ | *Python, NumPy, Pandas, Seaborn, Scikit-learn*   **Jul 2024**
- Developed a **machine learning model** to **predict house prices**
- includes data **preprocessing, feature engineering,** and **regression model implementation** to estimate house prices based on various features

ToDo App ☑ | *JavaScript, ReactJS, TypeScript, Vite, Emotion, MUI*   **Feb 2024**
- Developed a **ToDo-App** using **JavaScript, ReactJS, and TypeScript** to manage daily tasks efficiently
- Utilized **Vite** for fast build and development setup, and integrated **Emotion** for CSS-in-JS styling
- Implemented **Material-UI (MUI)** components for a responsive and modern user interface

INTERNSHIP

Design Innovation Centre, Panjab University ☑   **Jun 2023 − Jul 2023**
Artificial Intelligence Intern   *Chandigarh, India*
- Contributed to the preprocessing and classification of fundus camera images for **diabetic retinopathy detection**
- Implemented **machine learning algorithms** to improve the accuracy of image classification
- Collaborated with a team to enhance the **pipeline for data preprocessing and model training**

TECHNICAL SKILLS

Languages: C, C++, Python, HTML, CSS, JavaScript, SQL, XML
Developer Tools: VS Code, Jupyter Notebook, XCode, GitHub, MySQL, Tableau, AWS
Technologies/Frameworks: Linux, Unix, TensorFlow, React, NodeJS, ExpressJS, Git, MongoDB
Soft Skills: Adaptability, Leadership, Communication

CODING PLATFORMS

- Solved **100+** Problems on **Leetcode** ☑
- Codeforces Max Rating **665** ☑

CERTIFICATIONS

- Intro to Python ☑
- Intro to Machine Learning ☑
- Microsoft AI Classroom - **Microsoft** ☑
- JavaScript ☑
- XML ☑
- AI/ML For Geodata Analysis - **ISRO** ☑

EXTRACURRICULAR

- Member of **Jugaad - Robotics Club of UIET**
- Member of **Imagen - Photography Club of UIET**
- **NSS** Volunteer from 2022 to till now
- Cyber Swachhta Intern at **Chandigarh Police Cyber Crime Branch**