Mohit Pal

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Education

Jaypee University of Information Technology

BTech in Computer Science Engineering (CGPA: 9.02/10)

Dec 2021 – May 2025

Solan, H.P

Relevant Coursework

- Data Structures
- Algorithms Analysis
- Artificial Intelligence
- Machine Learning

- Computer Networks
- Database Management
- Operating System
- Computer Architecture

Technical Skills / Soft Skills

Languages: C, C++, Python, Java, SQL, R

Libraries: Pandas, NumPy, Pygame, Scikit-learn, scipy

Developer Tools: VS Code, GitHub, Figma, Google Cloud Platform, Android Studio, Xcode Technologies/Frameworks: MacOS, Flutter, HTML/CSS, JavaScript, Reactis, Django, Bootstrap

 $\textbf{Interpersonal:} \ \ \textbf{Leadership, Verbal Communication, Collaborative, Problem Solving, Creativity, Adaptability, Attention to the problem of the proble$

Detail, Self-motivation

Experience

Frontend Developer, Fellowship

Solan, H.P

- Coordinated a **3-member** team in developing an AI-powered Effective Learning Platform.
- Designed and developed platform's frontend utilising Figma software, HTML, CSS, and Javascript.
- Out team implemented AI-powered exam creation tool, reducing exam creation time by 50% and increasing exam diversity by 35%; led to a 20% improvement in student learning outcomes.
- Managed the implementation of a proctoring system, enhancing exam security and student verification for a secure online testing environment.

Projects

Alzheimer's Disease Classifier | Python, Machine Learning, Data Science github

- Proposed an ensemble framework for precise classification of individuals (Demented, Non-Demented, Converted) with critical applications in healthcare and research.
- Employed **SMOTE** and **Stacking Ensembling** in order to address class imbalance and harness the predictive power of multiple classifiers, thereby **improving** classifier accuracy by approximately 5% on imbalanced datasets.
- Attained a remarkable 96.47% overall accuracy and impressive 96.49% precision and recall.
- A research paper is under writing phase.

CosmoVibes | Python, OOPs github

- Created a realistic solar system simulator using Pygame library, accurately representing the celestial bodies motion.
- Crafted an intuitive user interface with interactive controls, with smooth background music.
- Enhanced user engagement by integrating educational content to display real-time information about each planet, fostering both entertainment and learning.

Dijkstra's Traffic | C/C++, OOPs, Data Structures github

- Implemented a C++ program utilizing graph theory to model and simulate a road network.
- Used Dijkstra's algorithm to find optimal routes for vehicles navigating intersections and roads.
- Integrated OpenGL for 2D graphics, providing an interactive and visually engaging representation of the simulation.

Achievements / Extracurricular

- Attained Rank 1 and honored as Top Performer at JUIT's Annual Tech Fest, Murious 17.0, CODE CHAOS Contest.
- Secured Rank 2 at the Hack-a-Care Hackathon jointly hosted by the Rotaract Club of Waknaghat and the Centre of Excellence in Artificial Intelligence(CoEAI).
- Co- Authored a research paper on renewable energy source selection using T-spherical fuzzy soft Dombi aggregation operators, with the paper accepted for publication by Scrivener Publishing.