UTKARSH SHRIVASTAV

Email:utkarsh.shrivastav202002@gmail.com GitHub: github.com/utkarsh-shrivastav77
LinkedIn: linkedin.com/utkarsh-shrivastav07 Website: utkarsh-shrivastav77.github.io

PROJECTS

❖ **Career Prediction Model** (Github) | **Python, Numpy, Pandas , Supervised learning**
- Built a machine learning which predict the career of a student using the various aptitude test and personality test scores.
- Built our own dataset of career for the various scores and used **Pandas** for data manipulation and data cleaning.
- Used the **Random Forest Algorithm** for the machine learning model to predict the career.

❖ **Handwritten Digit Recognition** (Github) | **Python, Tensorflow, Keras, Numpy**
- Developed a Handwritten Digit Recognition system utilizing **TensorFlow** and **Keras** neural networks to accurately predict numbers from handwritten digits.
- Implemented **softmax function** for numerical stability and **Sparse Categorical Cross-entropy loss function** to facilitate predictions between 0-9, ensuring robust classification performance.
- Utilized **Confusion Matrix** and **Seaborn** to evaluate the accuracy of the dataset, providing insightful metrics for assessing the model's performance and improving its predictive capabilities.

❖ **Book Recommender System** (Github) | **Numpy, Pandas, Scikit-Learn**
- Created a Book Recommender System using Python libraries **Numpy**, **Pandas**, and **Scikit-learn** within **Jupyter Notebook environment**, leveraging datasets sourced from Kaggle.
- Implemented **Cosine Similarity** to identify similar books, employing Pandas for efficient data manipulation and processing to enhance recommendation accuracy.
- Developed a robust recommendation engine capable of suggesting relevant books based on user preferences, demonstrating proficiency in data analysis, machine learning techniques, and **collaborative filtering methodologies**.

❖ **Sudoku Solver** (Github) | **C++**
- Implemented a Sudoku Solver in C++ leveraging the **Backtracking Algorithm**, a fundamental concept from **Data Structures and Algorithms**. Utilized recursion to efficiently explore and solve Sudoku puzzles. Incorporated **File Handling concepts** to output solutions to text files, demonstrating proficiency in algorithmic problem-solving and file manipulation techniques.

EDUCATION

❖ **Electronics and Communication (ECE)** | Institute of Engineering & Technology, DAVV
CGPA: 7.17 | (Nov 2021 - Present)

ACHIEVEMENTS / HOBBIES

❖ **Codechef** : 3 Stars with maximum rating : 1616 (Profile).
❖ Best Ranking in the contest (codechef) : **Global Rank 85**.
❖ Participated in **Meta Hacker Cup** Qualified for Round 1 (Certificate)
❖ Playing Chess and Reading Books.

RELEVANT COURSES

Data Structure, Computer Programming in C++, Object Oriented Programming
Online Courses:-
Machine learning Specialization , Neural Networks and Deep Learning, Artificial Intelligence Foundation : Thinking Machines, Introduction to Programming with Python (CS50)

TECHNICAL SKILLS

Programming Languages : C++, Javascript, Python.
Machine Learning : Tensorflow, Keras, Numpy, Pandas, Scikit-Learn
Databases : SQL, NoSQL, Mongodb.
Frameworks : NodeJS, Django, Flask, Express, Socket Programming.