Vishal Singhania

vishsinghania@outlook.com | +91-7782874447 | vishal.209303024@muj.manipal.edu

EDUCATION

MANIPAL UNIVERSITY JAIPUR
Faculty of Engineering
BTech in Computer and Communication Engineering
Minor in Data Science
Aug 2024 | Jaipur, Rajasthan
Cum. GPA: 8.91 / 10.0 (till 5th Sem)

LINKS

Github/**SinghaniaV**
LinkedIn/**singhania-v**
Kaggle/**bigvish**
CodeChef/**big_v**
Codeforces/**BigV_**
Leetcode/**bigV_**

COURSEWORK

UNDERGRADUATE
Design and Analysis of Algorithms
Data Structures and Algorithms
Object Oriented Programming
Operating Systems
Database Systems
Computer Networks
Wireless Communications*
Computer Architecture
Machine Learning*
Automata Theory & Compiler Design*
Probability & Statistics
Discrete Mathematics

*[*to be completed by May 2023]*

OPENCOURSEWARE
(Google Drive link to Certifications)

SKILLS

PROGRAMMING
Comfortable:
C • C++ • Python • Java
MySQL
Familiar:
MATLAB • Shell • Git • LaTeX
HTML, CSS • JavaScript

INTERESTS

Algorithms • Math • Economics
Competitive Programming

PROJECTS

STOCK EXCHANGE ⎋ | API, WebApp, Database
Flask | SQLite | Python | HTML, CSS | JavaScript
- A WebApp that allows logged-in users to "buy" and "sell" stocks (with pretend money) as well as look up real stock quotes fetched from **IEX API**. Users can also view their stock portfolio transaction history.
- The **Database** stores a **hash of the user's password** corresponding to their username.
- Require that a user input a **stock's symbol** whose quote is displayed by **querying IEX** for stocks' prices.
- All the **transactions** are subsequently updated in the **database** and in their book.

PASSWORD MANAGER ⎋ | Cryptography, Symmetric-key Algo
Fernet | Python
- A CLI Password Manager in Python which uses the **Fernet** module in **Cryptography** (package) to encrypt passwords using **Symmetric-Key** encryption.
- The user can **save** and **retrieve** passwords locally using their **master password**.

WORDLE ⎋ | CLI App | Algorithm
Python
- An implementation of the famous game **Wordle** (originally developed by Josh Wardle) in Python than can be played via the terminal.
- Each guess must be a **valid five-letter word**. The color of the tiles will change to show how close your guess was to the word.
- Used **dataset** of 6000 five-letter words.

HOUSE PRICE PREDICTION ⎋ | Data Science, Machine learning
NumPy | Pandas | Python
- With seventy-nine explanatory variables describing (almost) every aspect of residential homes in Ames, Iowa, used **NumPy** and **Pandas** to extract useful data which affects house prices.
- Applied advanced regression techniques like **Random Forest** and **Gradient Boosting** to predict the prices (ranked under *800* out of *21k* competitors on Kaggle).

ENCRYPTED CHAT ⎋ | Cryptography, Asymmetric-key Algo
RSA | Python
- A CLI Chat App which uses **RSA (Rivest Shamir Adleman)** encryption algorithm to send and receive messages.

ACHIEVEMENTS

3 star (Div. 2) with highest **rating of 1600** on CodeChef
Rank of 946 in a codeathon organized by IIT BBS
Global Rank of 293 in Codechef Starters 75
Global Rank of 356 in Codechef Starters 76
Competitions Contributor on Kaggle
Qualified Round 1 of Semi Code (an Institute level Codeathon) by ACM Chapters
Open Source contribution recognized in **Hacktoberfest 2021**