HIVAM GUPTA

Codechef Portfolio Leetcode

Education

Indian Institute of Information Technology Bhopal, India

Bachelor of Technology in Computer Science and Engineering

Hanraj Modern Public School, Jhansi

XII CBSE BOARD

March 2008 - March 2020

CKC Academy, Jhansi X CBSE BOARD 93%

Projects

Sorting Visualizier | HTML, CSS and Javascript

Github

91%

December 2022 - June 2026

CGPA: 8.06 (upto 3rd Sem)

March 2020 - March 2022

• Objective: To create an educational tool aimed at captivating students' attention while enriching their comprehension of sorting algorithms

 Created the frontend using JavaScript, integrating functionalities for adjusting sorting speed and variations across arrays of diverse sizes

• Incorporated 5+ key sorting algorithms, utilizing their characteristics to demonstrate their performance across diverse values and lengths

Codeforces web scrapping | Selenium, Matplotlib

Github

• Objective: Developed a web scraping script using Selenium to extract submission data from Codeforces, enabling efficient analysis of user activity and performance.

• Utilized Selenium's capabilities to navigate and interact with the Codeforces website, collecting information on the number of accepted and not accepted submissions for a given user

• Implemented data visualization techniques with matplotlib to present the submission counts by verdict in an easily understandable bar chart format, aiding in visual analysis and interpretation

Rubik's Cube Solver - using Korf's IDA* Algorithm | Korf's Research Paper

Github

• Modelled a virtual Rubik's Cube (3 x 3) in 3 different models/classes (3D Array Model, 1D Array Model, BitBoard Model)

• Implemented OPPS concepts like Classes and Objects, Virtual Functions and Abstract Classes, Inheritance, Operator Overloading

• Achieved a solving time of under 3 seconds for a Rubik's Cube jumbled 8 times, using BFS, DFS, and IDDFS algorithms

• Implemented the Korf's IDA* Algorithm, achieving a solving time under 10seconds for a Rubik's Cube jumbled 13 times

Skills

Languages: C, C++, Python, HTML, CSS, JavaScript, SQL, Typescript

Techstack: Tensorflow, Keras, Django, Selenium, Matplotlib

Developer Tools: Git, Github, Gitbash, VS Code, Google colab

Soft Skills: Team Management, Interpersonal and Intrapersonal Skills, Public Speaking, Content Writing

Certificates and Achievements

• Secured a global rank 262 in Starters 126, and global rank 313 in Starters 125 '24

- Secured a ${\bf rank}$ 81 out of 1000 in ${\bf Coderush}$ organized by Algouniversity

• 4 star coder on CodeChef (highest rating - 1839)