Mukul Joshi

EDUCATION _

COLLEGE OF TECHNOLOGY AND ENGINEERING, UDAIPUR

• B.Tech in Electronics and Communication | 62.1% | M.P.U.A.T

2017-2021

CENTRAL ACADEMY SENIOR SECONDARY SCHOOL. UDAIPUR

2014-2016

- 12th Examination | 84% Central Board of Secondary Education
- 10th Examination | 7.6 CGPA Central Board of Secondary Education

SKILLS _

PROGRAMMING LANGUAGES Experienced: Python | C Familiar: C++ | Java | Dlang | SQL | Bash | PHP

SOFTWARE DEVELOPMENT Programming Paradigms | GIT | CLI | Data Structures and Algorithms

FRAMEWORKS & LIBRARIES Pygame | Matplotlib | Flask | Linux | Django

MARKUP LANGUAGES LATEX | HTML | Markdown

PROJECTS __

PAINT PROGRAM

 $Desktop\ Application, Python, Pygame, Tkinter, Numpy$

- Designed a raster graphics editor that allows users to create and edit images interactively on a computer screen.
- Flood Fill algorithm is used to implement the Paint Bucket tool. Deque is used to implement Tabs functionality.
- Implemented Drawing Tools such as Rectangle, Ellipse, Line, Freehand, Paint Bucket, Copy Tool, Eraser.

SORTING VISUALIZER

Desktop Application, Python, Pygame

- Visualization of Sorting Algorithms such as Merge Sort, Bubble Sort, Selection Sort, Quicksort, Insertion Sort.
- In-Place Quick Sort and In-Place Merge Sort are used for faster sorting and better memory management.

MINI PROIECTS

- Built a Simple Equation solver using Abstract Syntax Trees, which can solve simple algebraic equations.
- Designed Terminal Todo list program with functionality of add, delete, list, done, report of Todo items.
- Designed Sierpinski carpet and Cantor set visualization (Infinite self similar patterns) in pygame.

ACHIEVEMENTS

Top 2% with World Rank of 6949 at codewars.com and solved 200+ problems on codewars.

Codewars Profile

Top 1% with 23k points at interviewbit.com and solved 100+ problems on interviewbit.

InterviewBit Profile

• 1059 contest rating on codeforces.com and solved 380+ problems on codeforces.

Codeforces Profile

- Scored **96%** in coding round of CoCubes assesment. Top **97** percentile in India.
- Attained Five stars, Golden Badge for Python Programming on HackerRank.

CERTIFICATES & COURSES

- Problem Solving Ability Test consisted of Sorting, Searching, Dictionary & Array Problems by HackerRank.
- Python Assessment consisted of Collections, Iteration, Modularity, Objects and Classes by HackerRank
- Java Assessment consisted of Strings, Classes, Inheritance, Exception Handling by HackerRank.
- Data Structures and Algorithms in Python by the instructor, Holczer Balazs through Udemy.
- Introduction to Algorithms and Data Structures 6.006 through MIT OPENCOURSEWARE.

EXPERIENCE

CODEWARS 2020-Present

PROBLEM SETTER

- Authored several Problems on Codewars ranging from Hashing to Divide and Conquer.
- Those problems were solved by a total of 206 Users and earned 31 Stars.