SAI SIDDHARTHA VIVEK DHIR RANGOJU

GITHUB - LINKEDIN - CODEFORCES - CODECHEF

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EDUCATION

Final Year, B. Tech. (Computer Science and Engineering), **Mahindra University, Hyderabad, India,** October 2020 - July 2024 – *8.06 CGPA (6 Semesters out of 8 Semesters).*

SKILLS

Programming Languages: C++, C, Python, Java, HTML, CSS, Javascript, SQL

Databases: MySQL and MongoDB

Tools/Technologies: Docker, Jira, ExpressJS, NodeJS, Git, GitHub.

Developer Tools: VS Code, Android Studio, Figma

PROFESSIONAL EXPERIENCE

1. **Oracle, Hyderabad** - *Project Intern*
   Duration: July 2023 - August 2023
2. **Mahindra University, Hyderabad** - *Research Assistant, Duration :*
   December 2021 - PRESENT. **Research Assistant** for Professor Dr. Om Prakash Patel (P.h.D., IIT Indore, Faculty at Mahindra University, India).

PROJECTS

1. **AI Car - (Course Project: "Machine Learning with Python")**

- It is a self-driving car simulation made using a feed-foreword Artificial Neural Network (ANN) & Genetic Algorithm (GA). This project is completely written from scratch without using any machine learning libraries and the simulation is done using Pygame.

2. **Bull Game — Android Studio, JAVA, XML**

   -Bull Game is an android game made using Android studio in JAVA It is made using core concepts in app development such as activities, intents, buttons, view groups, and layouts (constrained layout).

3. **Inspiro Bot — Python, APIs**

   Inspiro Bot is a discord bot made using python library Hikari It gives Quotes to users when pinged with a command. It uses API calls to get quotes. It even detects depressing texts and motivates the user with inspiring Quotes.

Mini Projects:

1. **Join Databases using Hadoop MapReduce (Course Project: "Big Data"):** A big data project that performs the "join" operation based on a common key using Mapper and Reducer Functions.
2. **Extractive Text Summarization (Course Project: "Natural Language Processing")**
3. **Prediction of Wild Blueberry Yield:** Competitive Machine Learning Contest on Kaggle. Rank Obtained: 171/1807. Made predictions on the given synthetic dataset with mean absolute error as the metric.
4. **Battleship Bot:** Implemented probabilistic Heat Map to make a bot that plays the battleship game optimally.
5. **Mess Menu Bot:** Discord bot made using Python library Hikari. It gives a mess menu prior to 30 minutes of a meal. It also gives the menu on a specific day and time when requested with a command. This bot is currently being used by 1500+ people.

VOLUNTEERING

1. **TEAM LEAD - Enigma - The Computer Science Club (Mahindra University)** Jan 2022 - Feb 2022
    - My role here was to develop interest among university students in Computer Science. I have promoted Opensource development by helping people with their first pull request (teaching about Git and Github) [Hacktober Fest]. I have given a session on Google HashCode (Increased University participation to 100%).
2. **FOUNDER & HEAD - Hurricane Competitive Programming Club (Mahindra University, India)** Mar 2021 - Mar 2022
    - Started this club to assist my peers in enhancing their programming practices.
3. **MEMBER - Gas Monkeys Racing Club (Mahindra University, India)** Jan 2023 - June 2023
    - Part of the Mechanical-Team to make a Buggy

ACHIEVEMENTS

1. **Academic Scholarship INR 100000 Rupees (US$ 1205)** (Year 2022-2023, Mahindra University, India) -Given to the top 10% performers of the batch
2. **ICPC - International Collegiate Programming Contest** (2022 Amrithapuri, India) - Qualified for the regional round (Olympics of Programming)
3. **ICPC - International Collegiate Programming Contest** (2023 Mathura, India) - Qualified for the regional round (Olympics of Programming)
4. **Google KickStart- 2021 -** Stood Top 3000 in KickStart Round G. Stood TOP 3500 in KickStart Round E and Round F
5. **Google Hashcode - 2022 -** Stood Top 3500. Points Obtained: 1071918 pts.

6. **Codechef 3* programmer-(Rating 1786)**
7. **Pupil on Codeforces - (Max Rating 1311)**
8. **Enigma - MU Hacks - Stood 1st in university.** Build an interface that improves the college experience by helping people schedule courts
9. **Enigma - Reverse Coding Contest 2022-** Stood 2nd in university. Given Task: Write a code that best suits the outputs generated from the given binary files
10. **Enigma - Battleship contest - Stood 3rd in university. Task:** Code a bot that will play the battleship game against other bots
11. **Meta Hacker Cup 2022**

- Qualification Round Rank: 1069 out of 27000, Round 1 Rank: 4061, Round 2 Rank: 2993.

RESEARCH PUBLICATIONS

1. **Sai Siddhartha Vivek Dhir Rangoju**, Om Prakash Patel and Neha Bharill, "**Advanced Quantum Inspired Evolutionary Optimization Algorithm**", International Conference on Emerging Techniques in Computational Intelligence (ICETCI), IEEE, pp.57-64, August 25, 2022.
2. **Sai Siddhartha Vivek Dhir Rangoju**, Om Prakash Patel and Neha Bharill, "**Advanced Quantum Inspired Evolutionary Algorithm for Multivariate Optimization", 23rd** International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD), IEEE/ACIS, IEEE- Computer Society, Taiwan, Dec' 7, 2022.
3. **Sai Siddhartha Vivek Dhir Rangoju**, Govardhan Polepally, Prafulla Kalapatpu and Venkata Dilip Kumar Pasupulate, "**Structural Damage Detection through Finite Element Modal Using Evolutionary",** 14th IWSHM, Aeronautics & Astronautics at Stanford University, California, USA, Sept' 12-14, 2023 (Accepted)
4. **Sai Siddhartha Vivek Dhir Rangoju**, Om Prakash Patel and Neha Bharill, "**Soybean Genome Clustering Using Quantum-Based Fuzzy C-Means Algorithm",** The 30th International Conference on Neural Information Processing, ICONIP, Nov' 20-23, 2023, China. (Accepted).

LANGUAGES KNOWN

English, French (Elementary proficiency), Hindi, and Telugu.