HARSHAN M V

22PD14

Gender Male

Date of Birth 07th October 2004

Languages known English, Tamil, Hindi, Telugu **Email** harshanmv04@gmail.com

 Mobile
 9486802376

 GitHub
 Harshan M V

 LinkedIn
 Harshan M V

Address

Willow 1-C, Mayflower Estates, Uzhaippalar Street, Vellakinar Village, Coimbatore, Tamil Nadu - 641029.



OBJECTIVE

To obtain a position as an intern for a period of six months from May 2025 to November 2025.

ACADEMIC QUALIFICATION

Currently pursuing 3rd year of 5 year Integrated M.Sc. Data Science at the Department of Applied Mathematics and Computational Sciences at PSG College of Technology.

SKILL SET

| Languages | Python, C++, Oracle SQL |
|-----------|---------------------------------|
| Libraries | NumPy, Matplotlib, Flask |
| Tools | Oracle, Power BI, Spyder, Figma |

AREAS OF INTEREST

Supervised Machine Learning

Computational Biology

Data Visualization and analytics

ACADEMIC RECORD

| M.Sc. Data Science | | 2022-2027 |
|--------------------|---------------------------------------|-----------|
| | PSG College of Technology, Coimbatore | 8.43 CGPA |

• XII (Higher secondary, CBSE) 2022
Emerald Valley Public School, Salem 90.17 %

• X (SSLC, CBSE)

Emerald Valley Public School, Salem

2020

89 %

INDUSTRY-BASED PROJECT EXPERIENCE

NON-ACADEMIC PROJECTS

• Cure for Monkeypox through Biotechnological Methods (Research)

Currently doing research to find the cure for monkeypox virus using various biological and computational techniques. Makes use of several databases like Swiss Target prediction, DDBJ, NCBI etcetera. Mathematical concepts including but not limited to graph theory was implemented for the aforementioned. The end result is to form a graph having interactions with various genes and to find the most influential gene for the phytochemicals to act upon. The biological plant chosen is Tinospora Cordifolia.

ACADEMIC PROJECTS

Quantum Computing

Analyzed the means to encode the information using qubits of the quantum circuits by leveraging the modules provided in the **IBM's qiskit library**. The image compression was done by passing the qubits inside the encoding quantum circuit via bottleneck layer. Cost function was calculated using the swap test and the **qiskit.quantum_info's Statevector** was used for the virtual quantum interface.

Resource Constrained Project Scheduling problem

The problem was solved using **dynamic programming** where a completion of a project involves completing a group of tasks. The probability of task completion is taken in the form as a transition probability matrix. We exhaustively search all possibilities to find the sequence of task that has to be completed to minimize the cost, thus modelling it as an optimization problem.

Weather Forecasting Application

Developed a weather system where **HTML**, **CSS**, **JavaScript**, was used along with **Python Tkinter** thus implementing a hybrid model for the front-end and implementing **web scraping** concept in python to get live weather data from an external website. The hybrid model was created using python Flask.

EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Participated and won a variety of MUNs. The founder of GDMUN, an organization aimed to make people aware of United Nations.
- Furthermore, I have participated in and won several debate competitions.
- Was selected as the judge at IIMUN, and backed a sponsored trip to attend the conference.
- RJ at the PSG Community Radio 107.8 and was awarded "The Foreign Descent" for my English Proficiency.
- Elected as the class representative for the academic year 2022.

DECLARATION

I, Harshan M V, do hereby confirm that the information given above is true to the best of my knowledge.

Place: Coimbatore

Date: 31/08/2024 (Harshan M V)