SAMRIDHAA R

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Gender Samridhaa R

Date of Birth 28th September 2004

Languages known English, Tamil

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19,MMR Garden, Rajiv Gandhi Street, Telungupalayam, Coimbatore-641039.



OBJECTIVE

To obtain a position as a student intern 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++, C, SQL
Libraries and Frameworks	NetworkX, BeautifulSoup, NLTK, Streamlit
Tools	Gephi, Figma

AREAS OF INTEREST

Data Analytics and Visualization

Data Structures and Algorithms

Supervised Learning

ACADEMIC QUALIFICATION

•	M.Sc Data Science PSG College of Technology, Coimbatore	<i>2022-2027</i> 8.74 CGPA
•	XII (Higher secondary, State board) Avila Convent Matric. Hr. Sec School, Coimbatore	2022 97.5 %
•	X (SSLC, State board) Avila Convent Matric. Hr. Sec School, Coimbatore	2020 91 %

INDUSTRY-BASED PROJECT EXPERIENCE

The Yellow Network | Junior Data Analyst

(May 2024-July 2024)

Worked as a summer intern at The Yellow Network, a division of PSG STEP, contributing to the data analytics team. Automated web data scraping and cleaning using **BeautifulSoup** and **Selenium**, with task scheduling via **Cron jobs**, utilized **TesseractOCR** for image text processing.

NON-ACADEMIC PROJECTS

• Tamil-E: Tamil Brahmi Script Transcriber

Developed a **CNN** model with 3 convolutional layers for Tamil Brahmi recognition, enabling classification across 325 characters. Built an augmented dataset and implemented image segmentation using **Otsu's thresholding** and **connected component analysis**. Created a Streamlit interface to translate script images into modern Tamil text.

ACADEMIC PROJECTS

Credit Card Fraud Detection

Developed a fraud detection model on a **SMOTE**-balanced dataset using **XGBoost** and Random Forest with **Homomorphic Encryption**. Applied **OPE** for intermediate comparisons and **Paillier encryption** on leaf nodes to keep predictions encrypted. Decrypted predictions using Paillier's private key for secure analysis. Deployed the encrypted model via Streamlit.

Social Media Data Analysis on Environmental Sustainability

This project analyzes real-world Twitter data to assess public sentiment on environmental sustainability using **BERT**-based **sentiment analysis** from **Hugging Face Transformers**. Tweets are pre-processed with **NLTK**. The study uncovers trends and challenges related to human-environment interactions, highlighting opportunities for sustainability.

Music Player

This project is a music player application built in C++ that allows users to create accounts, log in, and manage a playlist of songs. It utilizes file handling and **doubly linked lists** to add, play, delete, search, and display songs in the playlist. The project also integrates the **Windows multimedia API (mmsystem.h)** to play audio files in **WAV** format and uses structures for storing song details efficiently.

Video Player

This project is a multimedia video player developed in Java using JavaFX and SceneBuilder. It supports media playback with features like volume control, playback speed adjustment, aspect ratio customization, and video navigation using sliders. The application integrates media controls through Java's MediaPlayer and MediaView classes. It utilizes FXML for UI design and event handling, ensuring a seamless media experience.

EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Actively participated in camps and social volunteer activities as a member of BSGIndia.
- Engaged in glass painting showcasing creativity.

DECLARATION

I, Samridhaa R, do hereby confirm that the information given above is true to the best of my knowledge.

Place: Coimbatore Date: 19/01/2025

(Samridhaa R)