

SUNDARAVELA A

Aspiring Data Engineer — Big Data Enthusiast

GitHub: github.com/SUNDAR2003SV — LinkedIn: linkedin.com/in/sundaravela-a

Email: sundar2003sv@gmail.com — Phone: +91 99944 13285

Portfolio: [My Portfolio Website](#)

SUMMARY

Recent Information Technology graduate skilled in SQL, Python, and Linux. Passionate about data engineering with growing expertise in Hadoop, Spark, and cloud data services. Aspiring to design scalable and efficient data solutions for modern data ecosystems.

SKILLS

- **Programming Languages:** Python
- **Database Management:** MySQL (RDBMS)
- **Workflow Orchestration & Scheduling:** Airflow, Cron
- **Operating Systems:** Linux
- **Web Technologies:** HTML, CSS, JavaScript
- **Development Tools:** Visual Studio Code, PyCharm, Jupyter Notebook, SQL Notebooks, GitHub
- **SSH & File Transfer Tools:** PuTTY, WinSCP

PROJECTS

Spotify Data Analytics

[GitHub Link](#)

Developed a data analytics pipeline using Spotify's Web API to extract music metadata, transform data with Python, and load into MySQL (RDBMS) for analysis. Visualized insights with Matplotlib and conducted ETL using Pandas in Jupyter Notebook, developed primarily in PyCharm.

Tools & Technologies: Jupyter Notebook, Matplotlib, MySQL (RDBMS), Pandas, Python, PyCharm, Spotify Web API

Zomato-like Food Ordering Website Data Analytics

[GitHub Link](#)

Built a full-stack food ordering system with MySQL (RDBMS) backend and Python Flask API. Performed SQL analytics to identify revenue and customer trends. Frontend implemented using HTML, CSS, JavaScript. Managed development in PyCharm.

Tools & Technologies: Flask, HTML, CSS, JavaScript, MySQL (RDBMS), Python, PyCharm, SQL Notebooks

Instagram-like Push Notification and Data Analytics

[GitHub Link](#)

Implemented real-time push notifications using Google Firebase Cloud Messaging with a Flask backend and MySQL (RDBMS) storage. Developed analytics on notification patterns and user engagement using SQL queries. Frontend integrated with Firebase SDK.

Tools & Technologies: Flask, Google Firebase Cloud Messaging, HTML, CSS, JavaScript, MySQL (RDBMS), Python, PyCharm

Local Mistral GPT with Flask Backend

[GitHub Link](#)

Developed a local AI chatbot application using the Mistral 7B model running on Ollama. Built a Flask backend with Flask-CORS for secure cross-origin communication between frontend and backend. The model runs entirely on the local machine, eliminating cloud API dependencies and ensuring data privacy. Created a responsive frontend for real-time AI interactions.

Tools & Technologies: Python, Flask, Flask-CORS, Ollama, Mistral 7B, JavaScript, HTML, CSS, PyCharm

Deep Learning-based Dementia Classification and Monitoring Using an Android App

Final year project leveraging ResNet-101 for spatial feature extraction and BiLSTM for temporal sequence analysis to classify dementia stages. Integrated into a React Native Android app for predictive analytics, real-time monitoring, and personalized care.

Tools & Technologies: BiLSTM, Jupyter Notebook, Python, PyCharm, React Native (Expo), ResNet-101, VS Code

EDUCATION

2021 – 2025	B.Tech in Information Technology, Sri Manakula Vinayagar Engineering College, Puducherry	CGPA: 8.21
2020 – 2021	Higher Secondary Certificate (HSC), Vivekanandha Higher Secondary School, Puducherry	86%
2018 – 2019	Secondary School Leaving Certificate (SSLC), Vivekanandha Higher Secondary School, Puducherry	84%

PUBLICATIONS

Deep Learning-Based Dementia Classification and Monitoring Using an Android Application
Maheshwaran.T, Nithyshkumar.G, Sundaravela.A, Kiran.S
Journal of Information Systems Engineering and Management (JISEM), Vol. 10, Issue 27S
DOI: <https://doi.org/10.52783/jisem.v10i27s.4419>

A deep learning approach integrating advanced neural networks with a mobile app for automated dementia diagnosis and monitoring, enabling early intervention and improved patient care.

Indexed by: Scopus, Web of Science

ADDITIONAL INFORMATION

Date of Birth:

07 November 2003

Languages:

English, Tamil

Certifications:

Java Full Stack Certification – Wipro TalentNext

Memberships:

Google Developer Student Clubs (GDSC) — Participated in technical workshops.