HARSHAVARDHAN S

SELF-PRESENTATION

Recent Computer Science Engineering graduate from VIT with a strong foundation in programming and machine learning. Interned at Pfizer's Statistical Data Sciences team, gaining hands-on experience in SAS, R and Python for data analysis. Contributed to NLP projects in clinical research with the Innovation Team. Known for analytical thinking, problem-solving and a passion for continuous learning.

EXPERIENCE

Pfizer

Statistical Data Sciences and Analysis Intern

Chennai, India

- Hands-on experience with SAS, R and Python for data manipulation and analysis.
- Underwent domain-specific knowledge transfer sessions focused on SDTM and ADaM standards.
- Shadowed the Innovation Team on NLP projects and developed a tool to automate the STDM team's workflow.

Kinaxis

Intern Chennai, India

- Received comprehensive training in JavaScript, enhancing proficiency in coding.
- Analyzed supply chain fundamentals and understood the impact of RapidResponse, Kinaxis' SCM software.
- Explored concepts of Machine Learning forecasting in the context of supply chain optimization.

RESEARCH PROJECTS

Research Paper - Encrypted Prediction (Published at IEEE Xplore) | Homomorphic Encryption and Deep Learning

- Implemented homomorphic encryption using ConcreteML to secure sensitive employee data during attrition predictions.
- Leveraged Docker to access ConcreteML and perform encryption-based computations efficiently.
- Designed an architecture in PyTorch capable of handling encrypted inputs, achieving a 94% prediction accuracy.

Research Paper - SmokerBeacon (Published at $\mathit{IEEE}\ \mathit{Xplore}$) | $\mathit{Object}\ \mathit{Detection}$ - $\mathit{Enabled}\ \mathit{IoT}$

- Developed a real-time cigarette smoking detection system using YOLOv9 and an IoT-enabled MQ135 gas sensor.
- The system used HTTP network protocols, enabling remote monitoring with alerts via LEDs and buzzers.

Research Paper - Detecting ASD (Published at Procedia Computer Science) | Deep Learning - Using MRI

- Explored distinct neural patterns associated with Autism Spectrum Disorder using MRI scans.
- Applied advanced deep learning techniques for feature extraction.
- Achieved 98% detection accuracy by leveraging machine learning classifiers on extracted features.

Research Paper - Multi-Label News Categorization (Presented at ICCCNT 2025) | Explainable AI with DistilBERT

- Developed a Distilbert model for multi-label news classification using 10-category Inshorts dataset.
- Integrated LIME for explainable predictions, enhancing model transparency.
- Achieved 97.37% macro F1-score and 94.20% subset accuracy, outperforming prior approaches.

EDUCATION

Vellore Institute of Technology

2021 - 2025

Bachelor of Technology in Computer Science

Chennai, Tamil Nadu, India

Velammal Vidyalaya

2019 - 2021

All India Senior School Certificate Examination (AISSCE)

Chennai, Tamil Nadu, India

CERTIFICATIONS

- Python: Basic HackerRank
- SQL: Intermediate HackerRank
- Solutions Architect Associate AWS
- Machine Learning using Autonomous Database Oracle
- Python for Data Science NPTEL

SKILLS

- PROGRAMMING: Python, Java, SAS
- WEB DEVELOPMENT: HTML, CSS, JavaScript
- PYTHON FRAMEWORKS: Flask, TensorFlow, PyTorch
- CONCEPTUAL KNOWLEDGE: DSA, OOPS, Docker