

Adhavan U S

Salem, Tamil Nadu, India | +91 8248101017 | [linkedin.com/in/adhavanus](https://www.linkedin.com/in/adhavanus) | github.com/Adhavan1801

Objective

Passionate about advancing artificial intelligence through innovative machine learning models, generative AI, and exploring large language models (LLMs). Eager to leverage strong problem-solving skills and a deep understanding of data structures and algorithms to develop impactful AI solutions in a dynamic, collaborative environment.

Education

Amrita Vishwa Vidyapeetham, B.Tech in Artificial Intelligence and Data Science – Aug 2024 – Apr 2028
Coimbatore, India

- CGPA: 8.87
- **Coursework:** Object-Oriented Programming in Java, Data Structures and Algorithms, Data Analytics, Machine Learning, Neural Networks

Projects

Graph Representation Learning for Gene Expression Analysis github.com/Adhavan1801/gene-expression-analysis

- Applied SVD and ML techniques to extract patterns from gene expression datasets, achieving 85% accuracy in identifying key biomarkers for medical research.
- Utilized Scikit-Learn and Matplotlib for data processing and visualization.

ChargeMax Predictor

github.com/Adhavan1801/PerovskiteML

- Built a machine learning model to predict compound formulas with high charge capacity using pymatgen and composition-based feature vectors (CBFV).
- Models used: LGBM, XGBM, Gradient Boosting Regressor, Random Forest, Extra Trees Regressor.

Web Pong Game Server on Raspberry Pi

- Developed and hosted a Pong game using HTML, CSS, JavaScript, and NGINX on Raspberry Pi 5, enabling real-time gameplay for 8+ users.

Skills & Technologies

AI & Machine Learning: Neural Networks, PCA, SVD, Scikit-Learn, Matplotlib, NumPy, Pandas

Languages: C, Java, Python, MATLAB, SQL

Tools: Git, Jupyter Notebook, scikit-learn, NGINX

Certifications & Workshops

- Prompt Engineering Workshop
- Foundations of Prompt Engineering (AWS)