

AMBIGAPATHI V

Data Scientist

Mettur Salem - Tamil Nadu

📞 9488936650 ✉ ambigapathikavin2@gmail.com 🔗 [linkedin.com/in/ambigapathi-v](https://www.linkedin.com/in/ambigapathi-v) 🐙 github.com/Ambigapathi-V

🌐 <https://ambigapathi-v.github.io/portfolio/>

Professional Summary

Aspiring Data Scientist with a strong foundation in machine learning, statistical analysis, and data engineering, with hands-on experience in building predictive models, data visualization, and deep learning through academic projects. Proficient in Python, SQL, TensorFlow, and eager to leverage analytical skills to drive impactful insights and innovation.

Education

Annamalai University

Bachelor of Agriculture

May. 2018 – May 2022

Chidambaram, Tamil Nadu

Relevant Coursework

- Python for Data Science
- Statistical Machine Learning (ML)
- Deep Learning
- Natural Language Processing (NLP)
- Database Management Systems
- Data Visualization Techniques
- Big Data Analytics
- Data Structures and Algorithms

Projects

Predictive Health Insurance Model | *Shield Insurance, Streamlit* — 97% Accuracy — *GitHub* July 2024

- Developed a **Random Forest model** for predicting health insurance premiums with 97 % accuracy, using **SMOTE** to tackle **data imbalance**, reducing underwriting time from 10 to 7 hours, and enhancing workflow efficiency by 30%.
- Worked with data engineers and underwriters to refine model accuracy, achieving a prediction accuracy of 97% on a dataset of 1,000+ customers.

Credit Risk Model Development | *Lauki Finance, Streamlit* — 92% Accuracy — *GitHub* August 2024

- Led the creation of a credit risk model using **logistic regression and decision trees**, categorizing loan applications as Poor, Average, Good, or Excellent, which enhanced risk assessment accuracy and model explainability.
- **Collaborated** with cross-functional teams to ensure smooth integration with the financial system, enhancing overall operational efficiency.

Tomato Disease Classification | *TensorFlow, Python, Deep Learning* — 90% Accuracy — *GitHub* September 2024

- Led a team to develop a **CNN model** with **TensorFlow**, classifying tomato diseases from a dataset of 13,000 images, achieving 90% accuracy to help farmers identify diseases early and minimize crop loss.
- Utilized my knowledge from my degree in Agriculture to understand the implications of plant health, enhancing the model's relevance to real-world agricultural challenges.
- Implemented **data augmentation** techniques to enhance model robustness and improved prediction accuracy through hyper parameter tuning.

Customer Churn Prediction | *Deep Learning, Streamlit* — 85% Accuracy — *GitHub* September 2024

- Designed and implemented a deep learning model using an **Artificial Neural Network (ANN)** to predict customer churn. Analyzed customer behavior patterns and utilized **Keras** for model development, achieving an accuracy of 85%, thereby enabling strategic retention efforts.
- Led **data preprocessing and feature engineering** to optimize the model's accuracy.

Technical Skills

Programming Languages: *Python, HTML/CSS, SQL*

Machine Learning Tools: *TensorFlow, Keras, Scikit-Learn, NLTK, Spacy*

Data Visualization: *Matplotlib, Seaborn, Plotly, Power-BI*

Development Tools: *GitHub, MLflow, Docker, Visual Studio Code, jupyter Notebook,*

Data Preprocessing: *Feature Engineering, SMOTE, EDA*

Soft Skills: *Team Collaboration, Problem-Solving, Critical Thinking*

Certifications

MySQL Database Certification

Master Machine Learning for Data Science

Python for Data Science Fundamentals

Scaler (2024)

CodeBasics (January 2024)

Simplilearn (2024)