Seetharaman Radhakrishnan

Data Scientist|Python Developer |AI/ML Engineer
Open to Relocation & Global Opportunities|UK Graduate Visa Holder
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Summary

AI and Machine Learning graduate with strong Python programming, data analysis, and deep learning skills. Proficient in designing and deploying machine learning pipelines, building interactive apps, and integrating APIs. Experienced in NLP, signal processing, and image analysis. Passionate about solving real-world problems through applied AI, with multiple self-driven projects hosted on GitHub.

Experience

Sainsbury's - Sheffield, UK May 2024 - Present
Online Assistant

- **E**nsured order accuracy and quality by selecting and preparing customer orders.
- **P**rovided customer-centric service, accommodating specific product requests and fostering teamwork in a fast-paced setting.

Independent Developer - Sheffield,UK September 2024–Present
AI & Python Projects

- **B**uilt end-to-end Python apps for math utilities, data tools, and games using OOP and Streamlit.
- **D**eveloped CLI and GUI tools for statistics, unit conversion, matrix operations, and cryptography.
- **C**reated a Student Performance Analytics project using UCI ML dataset; applied Random Forest and Logistic Regression to identify academic performance indicators.
- **P**ublished well-documented code with Jupyter notebooks and GitHub repositories.

Education

Sheffield Hallam University - Sheffield, UK 2023-2024
M.Sc.(Artificial Intelligence)- Merit(2:1)

PSNA College of Engineering and Technology - Tamilnadu,India 2018-2022
B.E(Electronics and Communication) - FirstClass Honors

Core Skills

- **Deployments & API Development:** Python , REST APIs,CLI Apps, Streamlit Apps, GitHub Projects
- **Machine Learning & Deep Learning:** Neural networks, generative AI, probabilistic generative models, LLMs, Transformer models.
- **Computer Vision & Image Processing:** AI-driven image reconstruction, content editing, and signal processing.
- **Programming & Frameworks:** Python, TensorFlow, PyTorch, Sklearn, Langchain.
- **Data Analysis& Optimization:** Feature Engineering, debugging, data pre-processings, and problem-solving.
- **Tools & Version Control:** Git, Google Colab, VS Code, Webots, Overleaf, MATLAB

Projects |Link

- **SuperStore Sales Dashboard** Jun 2025
  Built an end-to-end interactive dashboard using Streamlit, Pandas, Seaborn, and scikit-learn to analyze a retail store's historical sales. Integrated KMeans clustering for customer segmentation; used F1-score and precision for cluster evaluation. Visualized insights through dynamic KPIs and charts, enabling year/region filtering. Applied PCA to project clusters into 2D space for interpretability.
- **Student Performance Analytics** Jun 2025
  Analyzed academic performance using UCI ML datasets through data cleaning, exploratory analysis and modeling. Built Random Forest and Logistic Regression models to predict student grades, identifying G2 as the most significant predictor of final performance.

- **Math Utility Toolkit** May 2025
  Developed a Python-based console and Streamlit GUI application combining calculator functions, geometry helpers, statistical tools, quadratic equation solvers, and sequence generators using Object-Oriented Programming and libraries like NumPy and Streamlit.
- **Python Utility Toolkit** May 2025
  Created a multi-functional Python command-line tool featuring unit conversion, cipher encryption/decryption, random number games, scientific and matrix calculators, and age/date utilities using modular classes and libraries such as python-dateutil ,streamlit and NumPy.
- **Reconstructing Image from Brain Activity** Jan 2024
  Applied deep learning in PyTorch to reconstruct images using autoencoders from neural data.
- **Handwritten Digit Recognition** Dec 2023
  Developed classification model using Random Forest and neural networks with TensorFlow, Sklearn, NumPy, and Pandas.
- **Wall Following E-puck Robot** Dec 2023
  Designed autonomous navigation algorithms leveraging sensor fusion and Webots simulation.
- **Schwa Identification** May 2024
  Engineered AI-driven pipeline to improve ESOL pronunciation using techniques like MFCCs, RMS, ZCR, and formant frequency analysis.
- **Forecasting Depression in Students** Sept 2024
  Developed models to analyze student depression severity using machine learning, achieving 95.06% precision with Random Forest.
- **Heart Diseases Prediction** Dec 2023
  Designed a predictive analytics system using KNN and Random Forest, incorporating feature engineering and data preprocessing.

Certifications

- **Python for Data Science, AI & Development**(IBM-Coursera) Feb 2025
- **Building a Personalized Chatbot with OpenAI and LangChain**(LinkedIn) Feb 2025
- **Hands-On AI: Build a Generative Language Model from Scratch**(LinkedIn) Dec 2024
- **Generative AI: Working with Large Language Models**(LinkedIn) March 2024
- **Introduction to Large Language Models**(LinkedIn) Mar 2024
- **Signal Processing Onramp**(MATLAB Coding) Mar2024
- **MySQL for Non-Programmers**(LinkedIn) Nov 2024