

Seetharaman Radhakrishnan

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Sheffield, United Kingdom

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 May 2024–Present Sheffield, UK
Online Assistant

- Ensured order accuracy and quality by selecting and preparing customer orders.
- Provided customer-centric service, accommodating specific product requests and fostering teamwork in a fast-paced setting.

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

- Built end-to-end Python apps for math utilities, data tools, and games using OOP and Streamlit.
- Developed CLI and GUI tools for statistics, unit conversion, matrix operations, and cryptography.
- Created a Student Performance Analytics project using UCI ML dataset; applied Random Forest and Logistic Regression to identify academic performance indicators.
- Published well-documented code with Jupyter notebooks and GitHub repositories.

Education

Sheffield Hallam University | 2:1 | Merit 2023-2024
Master of Science in Artificial Intelligence, Sheffield, UK

PSNA College of Engineering and Technology | First-Class Honors 2018-2022
Bachelor of Engineering in Electronics and Communication, TamilNadu, India

Projects | Link

- **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.

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

Certifications

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

Additional Information

- **Visa Status:** Eligible to work full-time in the UK under the Graduate Route Visa (valid until Dec 2027)
- **Open to Relocation:** open to relocation and remote opportunities