Emily Wills

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[LinkedIn](#) | [GitHub](#)

PROFILE

A highly analytical and results-oriented First-Class Computing & IT graduate specialising in Python, data analysis, and machine learning. Possesses hands-on experience managing the full lifecycle of software projects, from environment setup to model evaluation and data visualisation. Seeking to apply a strong technical foundation and proven problem-solving skills to a challenging role in the technology sector.

KEY SKILLS

Programming	Python, JavaScript, HTML, VBA
Machine Learning	TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn
Technical Tools	Anaconda, Jupyter Notebooks, Git, Excel (inc. Macros)
Core Competencies	Deep Learning, Data Analysis & Visualisation, Project Management, Algorithmic Problem-Solving, Quality & Compliance Analysis

EDUCATION

BSc (Hons) Computing and IT Practice (First-Class) | The Open University | 2022–2024
- **Focus:** Machine Learning & Artificial Intelligence, Data Analysis
- **Modules:** Machine Learning & AI, Software Engineering, Data Management and Analysis.

AAT Level 3 Advanced Diploma in Accounting | East Surrey College | 2020-2021
- **Modules:** Bookkeeping, Final Accounts Preparation, Management Accounting, Indirect Tax.

Diploma of Higher Education in Computer Science & AI | University of Sussex | 2014–2019
- **Modules:** Databases, Program Analysis, Object Oriented Programming, Machine learning, Genetic Algorithms, Neural Networks, Computer Vision, Data structures and Algorithms

TECHNICAL PROJECTS

Deep Learning for Astronomical Image Classification
- Developed and implemented Convolutional Neural Networks (CNNs) using Python and TensorFlow for classifying astronomical images, specifically galaxies.
- Explored the feasibility of running computationally intensive deep learning tasks on consumer-grade hardware, demonstrating accessibility for individual enthusiasts.
- Investigated the impact of various CNN architectures and data augmentation techniques on model performance, achieving 80% accuracy in galaxy classification.

Investigating the Challenges faced by CNNs in Tree Species Recognition
- Investigated challenges in tree species recognition from aerial imagery, focusing on class imbalance and varying classification granularity.
- Demonstrated that increasing model depth and utilising data augmentation can improve accuracy in challenging, imbalanced datasets.

PROFESSIONAL EXPERIENCE

Finance Compliance Administrator | Thales UK | Jul 2023–Jan 2024
- Enhanced departmental efficiency by building and optimising Excel macros (VBA) to automate compliance checks and data processing tasks.
- Designed and maintained statistical dashboards to report on quality and compliance metrics, translating raw data into clear business intelligence.

Finance Assistant | Natural World Safaris & Classic Collection Holidays | 2021–2022
- Managed and reconciled large volumes of transactional data with high accuracy, utilising advanced Excel functions and financial software.

INTERESTS

- **Gaming:** Avid player of tabletop RPGs and video games with a keen interest in game mechanics, systems design, and emergent gameplay.
- **Leadership & Strategy:** Former Captain of the University of Sussex Fencing Club's Women's Team, demonstrating teamwork, strategic thinking, and leadership.
- **Problem-Solving:** Enjoys the collaborative challenge of pub quizzes and strategy board games.