Lee W. A. Scott

contact@lee-scott.com | lee-scott.com | linkedin.com/in/leewscott | github.com/leewscott

EDUCATION

University of Strathclyde *Sep. 2025 – Jul. 2026*
MSc Artificial Intelligence and Applications (Expected)

University of St Andrews *Sep. 2021 – Jul. 2025*
BSc (Hons) Mathematics (2:1)

University of Glasgow Sutton Trust Programme *Jul. 2020*
Engineering Academic Skills (A)

Greenfaulds High School *Aug. 2015 – Jun. 2021*
Advanced Highers: Mathematics (A), Art and Design (C)
Highers: Mathematics (A), English (A), Physics (A), Computing Science (A), Graphic Communication (A), Design and Manufacture (A), Art and Design (A)

WORK EXPERIENCE

Sales Associate – TAAKs of Scotland *Sep. 2024 – Mar. 2025*
Handled sales, managed store closing/operations and provided customer service. Developed strong organizational skills through maintaining the store. Enhanced collaboration and initiative by working effectively within a team to meet sales targets and deliver a positive customer experience.

ACADEMIC PROJECTS

BSc Dissertation – Multi-Model Comparative Study of Data Augmentation Techniques for High and Low Risk Pigmented Skin Lesion Classification *Sep. 2024 – Apr. 2025*
Developed and evaluated eight convolutional neural network models – pairing LeNet-5 and EfficientNetV2-B0 each with four separate augmentation strategies (no augmentation, manual warping, grid-search optimized warping and GAN-based oversampling) – to distinguish between typical and atypical pigmented lesions from the HAM10000 dataset. Applied early stopping, callbacks and dropout to mitigate overfitting. Data augmentation improved metrics across all architectures, with the strongest model achieving an accuracy of 90.32% (+2.5% from without, +8.78% from lowest performing) and an F1-score of 86.95% (+2.15%, +10.6%). Documented processes, results and proposed avenues for future developments.

United Kingdom Surface Temperature Regression Integrating Spatio-Temporal Features *Mar. 2025 – Apr. 2025*
Worked in a team (adhering to an agreed contract) to develop models for temperature prediction – experimented with three standard regression architectures and one artificial neural network on a sampled ERA5 dataset. Developed a shared preprocessing pipeline for handling various types of data, investigated spatio-temporal engineered feature performance impact and hyperparameter tuned models. Best model achieved a RMSE of 1.24 and R2 of 0.94.

Machine Learning-Driven Predictions for Customer Fixed Term Saving Deposit Uptake *Feb. 2025*
Built predictive models using Scikit-Learn to classify if a customer would make a fixed-term saving deposit using bank marketing data from the UCI ML Repository. Performed an EDA, addressed class imbalances, engineered features and developed a pipeline to prepare for training. Trained and fine-tuned three different models using grid search and cross validation (macro average F1-score of 0.73 on test set for best performing model).

Optimal Treatment Methods for Breast Cancer Patients and Involvement of the Estrogen Receptor Gene (ESR1) in Method Choice *Sep. 2024 – Nov. 2024*
Explored the relationship between ESR1 gene expression levels and breast cancer treatment outcomes using the NKI Breast Cancer Dataset. Conducted an exploratory data analysis (EDA) and utilized statistical techniques (polynomial regression, Pearson correlation, hypothesis testing) to identify trends in survival outlooks and treatment efficacy across gene-expression/treatment subgroups.

AWARDS

Faculty of Science Masters Scholarship – University of Strathclyde *2025*
Awarded a scholarship of £1,400 based on excellent academic performance and extra-curricular experience.

Senior Honours Project Commendation – University of St Andrews *2025*
My BSc dissertation was Highly Commended by assessors from all divisions, recognising it as a runner up for the best dissertation throughout senior honours level.

General Wardlaw Scholarship – University of St Andrews *2021*
Awarded a merit-based scholarship of £16,000 recognising academic excellence in underprivileged students.

1st in Advanced Higher Mathematics – Greenfaulds High School *2021*
Achieved the highest overall mark in Advanced Higher Mathematics.

The Ascent – Saltire Award (50 Hours Volunteering, Completed at XS Taekwondo) *2020*

CERTIFICATIONS, SKILLS & EXTRACURRICULAR ACTIVIES

Certifications:

Artificial Intelligence Fundamentals (IBM), Emerging Technologies (IBM). Completed courses to strengthen core competencies in machine learning, natural language processing, and industry-relevant technologies. Gained practical insights into real-world applications of artificial intelligence workflows across various domains.

Programming Languages: Python, R, Java

Frameworks/Libraries: TensorFlow, Keras, Scikit-Learn, tidyverse, Git, NumPy, Pandas, Matplotlib, Seaborn

Tools and Software: Microsoft Office Suite, Jupyter Notebook, Adobe Photoshop, Cinema 4D

Activities: Scuba Diving (BSAC Ocean Diver) – University Sub Aqua Committee (Social Secretary, responsible for organising meetings and promoting inclusivity). Taekwondo – earned a black belt and volunteered as an instructor, competed and won medals in Scottish, British and Pan-European Championships. Chess, art/design, football, golf, hiking and cooking.