Dugald Macintyre

29/8 Jeffrey Street, Edinburgh, EH1 1DH| dugald.e.macintyre@gmail.com | 07444396343

EDUCATION

The University of Edinburgh **Edinburgh, UK**
BSc (Hons) in Artificial Intelligence and Computer Science *September 2023 – May 2025*

- Relevant Courses: Algorithms and Data Structures, Software Engineering, Data Science.
- Projected First-Class Honours (averaged and on track for a first).

Ardnamurchan High School **Strontian, UK**
Advanced Highers in Computer Science (A) and Mathematics(A) *August 2015 – May 2021*

- 7 As at Higher level, 2017 Enterprising Mathematics National Finals Winner.
- Head Boy, Digital Leader. Silver and Gold DofE. World Challenge 2018.

WORK EXPERIENCE

The University of Edinburgh **Edinburgh, UK**
Teaching Support Provider *September 2023 – May 2024*

- Conducting tutoring sessions for a student group, focusing on the "Introduction to Algorithms and Data Structures" course with the aim of helping students master complex concepts and enhance understanding.
- Developing presentation and time management organising and running sessions

AMP Clean Energy **Fort William, UK**
Work Experience *March 2020*

- Immersed in a learning experience with a small team gaining hands-on exposure to various coding techniques and practices such as MVC design patterns, fork and clone workflows, and error handling.
- Strengthened my understanding of web development and debugging through real-world scenarios, bolstering my coding knowledge and problem-solving capabilities.

PROJECTS

AIRBNB LISTINGS IN EDINBURGH / Python | GitHub [Link]

- Conducted an in-depth analysis of Airbnb listing prices in Edinburgh, employing advanced data science techniques such as data cleaning pipelines, complex modelling, regex, PCA, and visualisations.
- Collaborated within a team using feature branches on GitHub.
- Technologies Used: Python, Pandas, Matplotlib, Seaborn, scikit-learn.

TRADING BOT / Python | GitHub [Link]

- Developed and executed trading strategies, subjecting them to iterative backtesting on historical data from OANDA via their API.
- Technologies Used: Python, Pandas, API.

MOVIE RECOMMENDER / Python | GitHub [Link]

- Engineered a full-stack movie recommender system with personalised suggestions based on movie metadata, supporting single or multiple input movies.
- Designed an intuitive user interface and integrated database for seamless interaction.
- Technologies Used: Python, Flask, Pandas, scikit-learn, Bootstrap.

ADDITIONAL EXPERIENCE

THE GIT & GITHUB BOOTCAMP [Certificate] *June 2023*

- Covered essential Git and GitHub tools, workflows, and collaboration techniques for code-based projects.
- Proficient in complex git techniques such as stashing and rebasing.

ALGORITHMIC TRADING A-Z WITH PYTHON, MACHINE LEARNING & AWS [Certificate] *July 2023*

- Developed financial and trading knowledge by implementing, analysing, and combining trading strategies such as Bollinger Bands, The Stochastic Oscillator, MACD, and mean reversion strategies using RSI.
- Utilised machine learning for automated Forex trading on OANDA using AWS EC2 instances.

PYTHON FOR DATA SCIENCE AND MACHINE LEARNING BOOTCAMP [Certificate] *August 2023*

- Mastered core Data Science concepts including data cleaning, visualisation, regression, and classification.
- Explored advanced topics such as Natural Language Processing, Neural Networks, and Deep Learning with TensorFlow.

THE WEB DEVELOPER BOOTCAMP 2023 [Certificate] *August 2023*

- Hands-on experience creating responsive, full-stack, web applications using HTML5, CSS3, and ReactJS.
- Gained experience in secure backend development with Node, AJAX, and MongoDB.

ADDITIONAL SKILLS & INTERESTS

Languages: Python, C, Java, JavaScript, HTML + CSS | **Libraries:** TensorFlow, Pandas, Seaborn + Matplotlib | **Web Dev:** Node.js, ReactJS, Express | **Databases:** MongoDB, Relational Database (MySQL) | **Areas of Interest:** Data Science, Web Design and Development | **Soft Skills:** Problem-Solving, Self-learning, Presentation, Adaptability, Teamwork