Sebastian Jackson

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EDUCATION

University of Bath   **Oct 2022 – Sept 2023**

MSc. in Computer Science

- o **Grade:** Merit
- o **Relevant modules:** Databases, Artificial Intelligence, Reinforcement Learning, Software Engineering, Principles of Programming, Foundations of Computation, Functional Programming, Mobile and Pervasive Systems

University of Sheffield   **Sept 2017 – June 2020**

BSc. in Economics and Mathematics

- o **Grade:** 2.1
- o **Relevant modules:** Statistical Inference and Modelling, Probability Modelling, Mathematics and Statistics in Action, Econometrics, Financial Mathematics, Modern Finance, Advanced Macro-economics

St Peter's School   **2015 – 2017**

A-Levels: Mathematics (A), Geography (A), Chemistry (B)
AS level: Physics

Easingwold Secondary School   **2011 – 2015**

11 GCSE's: Geography (A*), Mathematics (A), Chemistry (A), English Language (A), English Literature (A), History (A), Further Mathematics (B), Engineering (B), French (B), Physics (B), Biology (B)

SKILLS

Programming Languages	Software Tools	Interpersonal
Python, Java, SQL, R Studio, MATLAB, HTML, CSS	Microsoft Excel, Word and PowerPoint	Decision-maker and Problem solver Effective communicator

PROJECTS

Dissertation: Combining Reinforcement Learning and evolutionary Strategies in Tetris   **Jun 2023 – Sept 2023**
GitHub link: https://github.com/SirSebLancelot/Tetris-Reinforcement-Learning
Technologies used: Python3, PyTorch, Keras, NumPy, Matplotlib, scikit-learn.

- o Developed a Tetris environment from scratch to train agents to play Tetris.
- o Implemented machine learning algorithms with neural networks to improve performance up to 3 times.
- o Ran experiments on high performance Linux systems, using SSH for access, script execution, and data retrieval.
- o Created a novel algorithm to improve performance.

Music Database Graphical User Interface (GUI)   **Jan 2022**
GitHub link: https://github.com/SirSebLancelot/Music-Database
Technologies used: Python3, SQLite3, Tkinter.

- o Implemented a GUI to create an interactive music database to explore artists, albums, and songs.
- o Used SQLite for data storage and retrieval.

Visualising Climate Data   **Feb 2022**
GitHub link: https://github.com/SirSebLancelot/Climate-Data
Technologies used: Python3, NumPy, netCDF4.

- o Extracted and manipulated precipitation data from NetCDF files over a 30-year period.
- o Visualised the change in precipitation over time in a gif.

EXPERIENCE

Gear4music - Warehouse Operative   **Sept 2020 – Dec 2020**
- o Worked with the Goods-In team: taking delivery of goods, recording stock levels, loading, and unloading delivery vehicles.

Enterprise Rent-A-Car - Assessment center   **2018**
- o Reached the final stage of the assessment center tasks over 6 weeks. This included exchanging a low value item for higher value items with local shop owners and organising a bake sale.

McDonald's Employee   **June 2017 – August 2017**
- o Trained to work in multiple roles; operated the grill and managed food levels to meet customer demand, prepared and packed food to order in a fast-paced environment.
- o Involved working efficiently in a team and communicating clearly with customers.