Frank Mitchell

frank.mitchell25@googlemail.com • github.com/fmitchell259 • Glasgow, G44 4SX • 07818088924

|  |  |  |
| --- | --- | --- |
|  | **Machine Learning Engineer** |  |
|  |  |

Detail-oriented Machine Learning Engineer with proven ability to deliver complex insights using data analytics and advanced methodologies. Known for great analytical skillset, strong attention to detail, and significant ability to work in a team environment. Adept with predictive modeling, data processing, and numerous data mining algorithms.

|  |  |  |
| --- | --- | --- |
| * Artificial Intelligence * Machine Learning * Software Engineering | * Python * Object-Oriented Design * Functional Programming | * Data Analysis * Tensorflow & Keras * Linux |

|  |  |  |
| --- | --- | --- |
|  | **Professional Experience** |  |
|  |  |

**Masters Student**, Strathclyde University (AI & Applications) 9/2019 to Present

Gained extensive experience with deep learning and neural networks while also learning about big data technologies. Adept with numerous advanced search techniques and able to evaluate machine learning techniques. Skilled with evolutionary computation for business analysis. List of projects can be seen below.

* Built a Deep Neural Network and achieved a 98% accuracy on the MNIST dataset using ReLU and Tanh activation functions.
* Produced an analysis for the big data module and achieved a 97% accuracy on the Kannada MNIST dataset using a Keras Convolutional Neural Network.

**Business Owner**, A.M.C. Automatics 8/2013 to 6/2019

Maintained inventory and adjusted prices regularly based on market conditions. Directed a team of sales staff using proven leadership techniques that boosted morale and staff motivation. Adept with financial management and often dealt with customer complaints in a professional manner as quick as possible.

* Increased sales by over 30% by using more space within the business and achieved the highest scoring daily sales record of 12 cars and 20 extended warranties in 1 day.
* Bid competitively at auctions and often obtained vehicles at 5% below wholesale value.

**Freelance Journalist**, Multiple online and print music publications 3/2010 to 10/2016

Wrote numerous feature pieces for publishers and always followed strict style guidelines. Known for always submitting work on time before deadlines and traveling for work when necessary.

* Flew to both Ibiza and Miami to cover interviews, conferences, and events. Often flew back home the very next day and created the story for publication.
* Successfully pitched a story on Danish techno music to an online music magazine and flew to Copenhagen to conduct the interview and write the story.

**Financial Administration Officer**, H.M.R.C. 12/2004 to 7/2008

Served as administrative support for finance manager and maintained a filing system for maximal organization. Developed, updated, and upkept monthly spending reports and coordinated with executives to discuss the financial position of the company. Paid third-party consultant invoices when needed.

|  |  |  |
| --- | --- | --- |
|  | **Academic Projects** |  |
|  |  |

**Supervised & Unsupervised Data Analysis on Speed-dating Data** Python

Performed complex analysis on speed-dating data to improve dating applications. Used Principle Component Analysis for dimensionality reduction and wrote a report that is available upon request. Made suggestions for improvements using K-means clustering and Support Vector Machines.

**2048 with Monte Carlo Tree Search & Mean Average Simulation-based Search** Python

Created a functional version of the game ‘2048’ from scratch. Design AI that could play the game using Monte Carlo Tree Search. Designed an additional algorithm to improve scores and the highest scores were achieved using a combination of models. There is a written paper that was completed available upon request.

**Genetic Algorithm: Find a Word** Python

Developed a system where a user inputs a word or phrase to be genetically evolved. The system begins by taking 10K 7 letter words consisting of random letters and using an iterative process, the algorithm will evolve the user’s word or phrase.

**Tamagotchi on Android** Java

Simulated the digital pet platform originally established in the 1990’s. The pet comes alive when launched and slowly loses stats over time. The user has the ability to feed, water, clean, and play with the pet and as stats go down below a certain level, the pet will die and the app closes. The app featured real-time weather mirroring through a weather.com API.

|  |  |  |
| --- | --- | --- |
|  | **Education** |  |
|  |  |

**Master of Science in Artificial Intelligence (IN PROGRESS)**

Strathclyde University, Glasgow

**Bachelor of Arts in Journalism (2008)**

City University, London (Class Two Division One Honours)

Kaggle Data Science Competitions - <https://www.kaggle.com/fmitchell259>

Titanic: Machine Learning from Disaster | Real or Not? NLP with Disaster Tweets