# Thomas C. Mason

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A highly motivated and passionate Computer scientist specialised in the area of Artificial Intelligence with one year's experience working as a Machine Learning Engineer. Excellent performance in projects with competence in building, training and testing of Deep Learning algorithms. Looking to further my position in the AI movement and be part of technological advancement.

# **Employment**

# **Machine Learning Engineer**

### Cerno Health

09/2021 - 12/2022

- Developed and improved the nocturnal sleep and nap detection algorithms, using multiple sensor signals.
- Improving performance of algorithms, using error analysis, data analysis and hyper-parameter optimization.
- Responsible for monitoring users in the data trial and ensuring good data quality during data collection.
- Experience with cloud environments including AWS and various services; S3, DynamoDB, Lambda.

### **Money Exchanger**

Post Office

03/2015 - 04/2019

- Working in the travel bureau; exchanging a wide range of currencies, issuing travel cards and insurance.
- Provided additional services including passport notarisation, document verification and processing parcels.
- Helped train and induct new colleagues into their new roles. Honed my customer service skills.

Tutor John Ruskin College 01/2015 - 06/2017

- Teaching mathematics to secondary school pupils on a weekly basis.
- Taught topics include Algebra, Calculus, Mechanical, Trigonometry and Probability.

# **Education**

Master's

# Queen Mary, University of London

09/2020 - 10/2021

- MSc in Artificial Intelligence, October 2021, Grade: Distinction.
- Modules: Artificial Intelligence, Bayesian Decision and Risk Analysis, Data Mining, Machine Learning, Machine Learning for Visual Data Analysis, Music Informatics, Neural Networks and Natural Language Processing.

#### Rachelor's

### Goldsmiths, University of London

09/2017 - 08/2020

- BSc in Computer Science, August 2020, Grade: First Class Honours.
- Modules: Algorithms and Data Structures, Databases and the Web, Data Mining, Machine Learning, Mathematical Modelling for Problem Solving, Neural Networks, Principles & Applications of Programming, Web Development.

### **Technical Experience**

### **Projects**

- Automatic detection of sleep micro-events with Convolutional Recurrent Neural Networks (2021). 

  Implemented and employed a CRNN model architecture, able to successfully identify sleep micro-events.
- Cryptocurrency forecasting using Recurrent Neural Networks on historical price data (2020). Application to predict future prices and trends of cryptocurrencies exploring RNN's, GRU's and LSTM's.
- Fitness mobile application 'EasyFit' to monitor a user's cardio exercise (2019).

  Team project designing and building an ios application to track fitness with user-tailored route generation.

# **Skills**

**Data science:** Machine learning, Artificial Intelligence, Signal processing, Data analytics, Data mining, Data visualization, Deep learning, Neural Networks, Natural Language Processing, Error analysis, Hyperparameter optimization. **Programming:** Python, Java, JavaScript, MATLAB, Bash. **Frameworks:** Tensorflow, Keras, Scikit, PyTorch. **Libraries:** Numpy, Pandas, Matplotlib, Librosa. **Web & database:** HTML, CSS, jQuery, MySQL, MongoDB. **Tech:** GIT, AWS, LaTeX, Colab, Jupyter, Microsoft Office.

# Certificates

DeepLearning.AI: Convolutional Neural Networks (2023).

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DeepLearning.AI: Sequence Models (2022).

DeepLearning.AI: Introduction to Machine Learning in Production (2022).

### **Hobbies**