Jack Leitch

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Work Experience

Machine Learning Consultant, IAAD-UK (remote)   **Feb – Jun 2021**

A U.K. based start-up specializing in data analytics, computer vision, and reinforcement learning

- Built an end-to-end license plate recognition system achieving 94% accuracy
- Developed using Python, TensorFlow, OpenCV, and deployed using AWS Lambda
- Reduced computing costs from MVP by 76% by cutting image processing time by 87%

Data Science Intern, RSA Insurance Group (Horsham, U.K.)   **Jun – Aug 2019**

- Forecasted motor insurance claims using time series methods (ARIMA) in R
- Incorporated 3rd party weather data into the model to improve short-term forecasts
- Integrated R-based forecasts into Excel, for use by actuaries with little coding experience

Data Science Projects

Strava Kudos Predictor   **Sep – Nov 2021**

- Created a tool that predicts Kudos (user interaction) on Strava activities to investigate which attributes impact Kudos in different ways
- Developed in Python using the Strava API, Scikit-Learn, SHAP, Seaborn, and Optuna
- Engineered new highly predictive features using domain knowledge, e.g. total runs per day
- Deployed an interactive app using Streamlit and Heroku to predict Kudos on new activities

What's Cooking? A Recipe Recommendation System   **Oct – Dec 2020**

- Built an NLP based tool to recommend recipes based on inputted ingredients to help students eat better and more diverse food
- Web-scraped over 4000 recipes using the BeautifulSoup package in Python
- Developed in Python using NLTK, Word2Vec, Flask, Heroku, and Streamlit

Ping Pong Ranking System   **Nov – Dec 2021**

- Based on the chess rating system, it helps rank me and my friends in ping pong
- Match and player data is stored in a BigQuery SQL database hosted on GCP

Data Science Blog   **Oct 2020 – Present**

- Published writer for Towards Data Science on Medium, with over 7000 total reads

Education

Boise State University – Idaho, U.S.   **2020 – May 2022**

*MSc, Mathematics with Statistics concentration – **4.0 GPA***

- Division I NCAA track and cross-country student-athlete
- Graduate assistantship that involves teaching two math classes each semester

University of Edinburgh – Scotland, U.K.   **2016 – 2020**

*BSc, Mathematics – First-class honors (**4.0 GPA** equivalent)*

- Relevant courses include Multivariate Data Analysis, Statistical Computing (R), Statistical Inference, Probability, Physics