# Ellie Birbeck

# **Experience**

### Technical Writer - Hyperion Dev 11/17 -

 Creating end-to-end technical tutorials on artificial intelligence topics (machine learning, deep learning, model deployment)

# Software Engineer Intern - Mi Águila 7/17 - 9/17

- Built a machine learning system to predict driver demand for a transportation start-up in Colombia
- Developed a heat map interface for visualising real-time predictions, and a matching algorithm to suggest locations to drivers
- Automated a business intelligence reporting process to save
  1 hour of company time per day

# Workshop Instructor - Digimakers 9/14 - 6/17

- Delivered hands-on programming and electronics workshops to children at a science museum, schools, and conferences
- Also previously held position promoting the organisation through marketing events and growing social media channels by 74%

# **Projects**

more at elliebirbeck.com/projects

#### **Tweets to Trades**

- An automated trading system based on a novel sentiment analysis approach to tweet classification, returning a 5% profit over 1 month
- Developed a business plan and product prototype based on the results of this research and pitched it to an industry panel

# Rate My Plate

- A Twitter bot that calculates the carbon footprint of a meal from a tweeted photo, created with 4 others in a 24-hr Boeing hackathon
- · Awarded the prize for 'Best Implemented Prototype' out of 18 teams

#### **StressLess**

An interactive stress ball created for a product design project,
 which uses pressure sensors as an environmental control system

### **Education**

### University of Bristol 2013-2017

- · M.Eng Computer Science
- First Class Honours (~4.0 GPA)
- · Won academic prize for research project

## University of Oregon 2015-16

· Third year spent abroad in the USA

### **Awards**

- Bloomberg Award for 'Best Final Year Project in Machine Learning' 2017
- Gold Award at UK Senior Maths Challenge 2012 and Junior Maths Challenge 2007/8

### **Skills**

- · Python (scikit-learn, TensorFlow)
- · Java, JavaScript, R, Matlab, HTML
- · Git, LaTeX, AWS, MongoDB, SQL

## **Achievements**

- Started an online business selling film merchandise aged 15, with a 50X ROI
- Elected as Head Girl at school, where I managed a team of 16, chaired 3 councils, and regularly spoke publicly to 1000+ people
- Selected by the Royal Institution of Great Britain for Mathematic Masterclasses for 5 years running (~100 selected across London)