Ellie Birbeck

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Education

University of Bristol
M.Eng Computer Science
Sep 2013 - Jul 2017

- First Class Honours (~4.0 GPA)
- Won the Bloomberg Award for 'Best Final Year Project in Machine Learning'
- Third year spent studying abroad at the University of Oregon

Experience

Technical Writer
Freelance | London
Nov 2017 - present

- Clients include Digital Ocean and Hyperion Development
- Creating end-to-end technical tutorials mostly focused on artificial intelligence topics (machine learning, deep learning, model deployment) - samples at elliebirbeck.com/writing

Software Engineer
Mi Águila | Bogotá
Jul 2017 - Sep 2017

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

Workshop Instructor
Digimakers | Bristol
Sep 2014 - Jun 2017

- Delivered hands-on programming and robotics workshops to children at city-wide events
- Previously worked promoting the organisation through marketing events, engaging with local news outlets, and growing social media channels by 74%

Projects

more at elliebirbeck.com/projects

Tweets to Trades
M.Eng Thesis

- Developed a novel approach to the sentiment classification of stock-related tweets, and an automated trading system using predictions on new tweets, returning a 5% monthly profit
- Pitched a business plan and product prototype based on this research to an industry panel

Rate My Plate
Boeing Hackathon

- Built a Twitter bot that calculates the carbon footprint of a meal from a tweeted photo
- Awarded the prize for 'Best Implemented Prototype' out of 18 teams

Deep Learning
deeplearning.ai

- Completed Andrew Ng's 5-course 'Deep Learning Specialisation'
- Implemented models in Python from scratch and using TensorFlow and Keras to perform object detection, music and language generation, face recognition, machine translation

Achievements

- Started an online business producing and selling film merchandise aged 15, with over 50X return on investment
- Elected as Head Girl at school, which involved managing a team of 16, chairing 3 councils, and public speaking to 1000+ people
- Gold Award for the UK Senior Maths Challenge 2012 and the UK Junior Maths Challenge 2008 and 2007
- Selected by the Royal Institution of Great Britain for Mathematic Masterclasses for 5 years running (~100 selected per year)