ERIC HAMBRO

Basement A, 108 St. George's Square, London, SW1V 3QY
(+44)·7768450070 ⋄ eric.hambro@gmail.com
github.com/condnsdmatters ⋄ linkedin.com/in/eric-hambro

PROFESSIONAL EXPERIENCE

Bloomberg LP July 2015 - August 2017
Financial Software Developer - Instrument & Pricing Platform Team *London, UK*

- I worked primarily on Bloomberg's flagship FX Derivatives Pricing Platform. This consisted of maintaining, developing and deploying a codebase of distributed services and libraries with a large C++ backend *($10^6 loc$)*, a JS frontend *($10^4 loc$)*, and Python testing framework *(10^5 loc)* in a Unix environment.
- I led the team's move to more modern working practices including: a configurable continuous integration system, moving our code to GitHub, and automating our distributed integration tests.
- I designed and implemented integration of new unique identifiers for saved trades, in our largest service. This required care in working with legacy systems, and close communication with stakeholders.
- I received 8 weeks full-time training in C and C++, and represented Bloomberg at Git Merge 2018.

The Recurse Center February 2015 - May 2015
Participant *New York City, USA*

- The Recurse Centre (RC) is a selective, self-directed, educational retreat for programmers. Here I split my time working on major projects, working through textbooks and writing smaller programs.

Example Project: Twirps *python, javascript, d3.js, numpy, Flask, Neo4j*

- I wrote Twirps to collect, analyse and visualize politicians' tweets in the UK General Election.
- I implemented the K-Means algorithm and vizualised the twitter graph and clusters with d3.js.
- *(cont. 2016)* Since then, I ported Twirps to a live-updating Flask app with a Neo4j database.

EDUCATION

University College London 2017 - 2018
MSc in Machine Learning Class: 1 (Distinction)

- *Received the highest overall degree average in the MSc (2018)*

Courses: *Module Average:* 88.6%

• Probabilistic and Unsupervised Learning* • Approximate Inference and Learning* • Advanced Deep Learning and Reinforcement Learning† • Supervised Learning • Statistical Natural Language Processing • Applied Machine Learning • Introduction to Deep Learning • Bioinformatics
*taught by Gatsby Computational Neuroscience Unit †taught by Google Deepmind

Thesis: *Thesis Mark:* 87.0%

- *"Automatic Documentation of Fine-Grained Elements in Source Code"*
  - I devised new encoder-decoder architectures to generate argument docstrings from syntactical and lexical features of source code. Architectures included decoding an attention vector over embeddings of the decomposed AST. I received the second highest mark in the year for my thesis.
  Supervised by: Prof. Sebastian Riedel (NLP) *Implementation*: Tensorflow, AWS

Cambridge University, Magdalene College 2010 - 2014
BA & MSci in Natural Sciences (Physics) Class 2:1, 69.7%

- *Received the top mark in Condensed Matter Physics (major course) (2014)*
- *Received Academic Exhibition to Magdalene College (2013)*

SIDE PROJECTS & OTHER EXPERIENCE

· (2018) Coursework - Derived and implemented Q-Learning, SARSA, Expected SARSA, Dyna-Q on toy problems. Implemented deep neural nets (CNNs, RNNs) to solve various toy problems (Tensorflow)
· (2017) Coursework - Derived and implemented Expectation Propagation, mean-field variational EM schemes on toy binary latent factor model (numpy)
· (2016) Smithers - Wrote a server for bots to play poker against each other (C++, ZMQ, websockets)
· (2016) Monty - Wrote a poker bot that plays using naive probabilistic methods (Python, websockets)
Internships (non-technical)**:** BGI *(Lisbon - 2014)*, Credit Suisse *(London - 2013)*, DHFL *(Mumbai - 2012)*