

Education

University College London - MEng Computer Science, First Class Honours 2011 - 2015

- Masters research project - [Predicting Personality from Twitter](#)
- Information Retrieval and Data Mining Prize
- [Best Undergraduate Research Group Project of the Year - Task Identification using Search Engine Query Logs](#)
- Developed a platform-agnostic [home automation system](#) capable of remote surveillance, command and control
- Developed an Android app for the Restless Beings charity to conduct field studies on children in poorly-developed countries

Imperial College London - MBBS Medicine 2009 - 2011

- Withdrew in second year to transition to computer science

Concord College, Shrewsbury - GCE A levels (Pre-A*) - AAAAab 2008 - 2009

- Outstanding Student of the Year 2008 - Double award (Chemistry, Music) | Most imaginative hovercraft design

Professional experience

R&D Scientist - Digital:MR May 2015 - August 2015

4-month feasibility study on sentiment analysis of images in social media, funded by a research grant from [the UK government's technology strategy board](#). Using the Yfcc100m and YLI datasets comprised of 100 million images, labels, and metadata, I investigated both existing and novel methods to develop a commercially-viable product.

Research Intern - Microsoft Research Cambridge May 2014 - August 2014

8-week research internship through the Bright Minds Intern Competition programme in the Machine Learning and Perception research group, working with Principal / Senior Researchers [Pushmeet Kohli](#), [Yoram Bachrach](#), [Ulrich Paquet](#), and [Filip Radlinski](#).

I worked on Project SmartFence - an application for web access control. Users block or allow the few sites they know and SmartFence infers the suitability for the rest of the web. We developed several different cluster/kernel-based models and visualization schemes, and I delivered a prototype for the OneWeek company-wide hackathon. A patent was applied for.

Founding Developer - Unientry.Ltd June 2013 - 2014

3-month internship and year-long support afterwards, to develop a pilot site to help sixth form students find the right university. The platform filters information from the UK's Higher Education Statistics Agency and gives recommendations based on students' registered information and grades.

Site: <http://www.unientry.org>

JP Morgan Spring Week 2013 - European HQ - 25 Bank St. Canary Wharf April 2013

Awarded second-best for code review and performance, and best for presentation, for our team's implementation of an implied volatility calculator.

Extracurriculars

Self-directed research: Deep convnet models for equities pricing June 2016 - present

The goal is to model the deterministic component of equities prices and relations between multiple time series, using layers of convolutional filter banks learned automatically through optimization. For simplicity, I used Microsoft's CNTK deep learning toolkit and QuantQuote's commercial tick-resolution historical dataset for all equities in the S&P500.

Study trip - Hokkaido Japanese Language School August 2014 - September 2014

Self-funded intensive study trip with home stay in Sapporo to supplement my self study.

Competencies

C#

Java

Python

ASP.NET

MATLAB

HTML/CSS3

JavaScript

d3.js

MongoDB

SQL

MediaWiki

LaTeX

Sibelius

Academic interests

Applied machine learning

Artificial intelligence

Natural language processing

Spoken languages and personal interests

English

Mandarin

Malay

Japanese (conversational)

Piano

Programming

Reading