

Education

Stanford Center for Professional Development - Graduate Certificate in AI 2017 - present

- CS231n Convolutional Neural Networks for Visual Recognition - Capstone: [Bounding out-of-sample objects](#)

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

- Final year 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 - School of Medicine - 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

Research Software Development Engineer - Ocean 5 Technologies March 2017 - present

Development of a command, control and analytics platform for fleets of GPS-and-sensor-equipped agricultural vehicles to be deployed in remote locations with unreliable internet access. Part of a government initiative to improve accountability and yield through technology and data. I work closely with electrical and mechanical engineers, and I am responsible for developing communication protocols and end-to-end systems development, hence my work spans from writing embedded C for microprocessors all the way to the Python backend and web UI.

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 - www.unientry.org June 2013 - 2014

3-month internship with UniEntry 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.

Side projects and extracurriculars

- JP Morgan Spring Week 2013 - Competition to develop a performant estimator of Black-Scholes' inverse. Best presentation, 2nd best performance.
- JP Morgan Code for Good Challenge 2012 - To develop an app that raises awareness about nature in cities.
- [SynthJS Music Made Quick](#) - Experimental music sequencer that runs entirely in the browser.
- 4-week intensive language study strip with home stay in Hokkaido.

Competencies

Python

PyTorch

MATLAB

JavaScript

C

C#

MediaWiki

LaTeX

Sibelius

Academic interests

I am most interested in data-driven decision-making, especially when they directly improve quality of life, e.g. imaging and natural language systems, assistive technologies, robotics, or medical applications. I value simplicity, humility, and the ability to adapt and learn.

Machine learning

Neural networks

Reinforcement learning

Time series

Spoken languages and personal interests

English

Mandarin

Malay

Japanese

Piano