

# Li Quan Khoo

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🏠 <a href="http://lqkhoo.com/wiki">http://lqkhoo.com/wiki</a>	🐙 <a href="https://github.com/lqkhoo">https://github.com/lqkhoo</a>
in <a href="http://www.linkedin.com/pub/li-quan-khoo/89/a27/8aa">http://www.linkedin.com/pub/li-quan-khoo/89/a27/8aa</a>	

## Professional experience

**Research Software Development Engineer - Ocean 5 Technologies Singapore** 2017 - present

- Designed and implemented a distributed messaging framework to support pilot-from-shore capabilities for underwater vehicles.
- Developed a controller for a tractor-drill combine while collaborating with E&E and mechanical engineers, to make certain types of rocky terrain feasible for agriculture.

Embedded systems • distributed systems and messaging

**R&D Scientist - Digital:MR** 2015

Completed a feasibility study on sentiment analysis of images in social media, funded by a research grant from [the UK government's technology strategy board](#). Starting from the Yfcc100m and YLI datasets comprised of 100 million images, labels, and metadata, I investigated both novel and existing methods and developed a commercial product, which has since evolved to be based on convolutional neural nets.

Supervised learning • imaging

**Research Intern - Microsoft Research Cambridge** 2014

Completed a 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 a few sites they know about, and SmartFence automatically infers the suitability of the rest of the web. We developed several different cluster/kernel-based models and visualization schemes. The final model generates a high dimensional embedding of websites from search sessions (think associated filtering). I delivered a prototype for the OneWeek company-wide hackathon, and a patent was applied for.

Unsupervised learning • information retrieval

**Founding Developer - [www.unientry.org](http://www.unientry.org)** 2013

Internship with UniEntry to develop a pilot site to help sixth form students find the right university. Developed a platform that filters information from the UK's Higher Education Statistics Agency and gives recommendations based on students' registered information and grades.

Web development • agile

**JP Morgan Spring Week 2013** 2013

Competition to implement a performant implied volatility calculator. Team awarded second-best for code review and performance, and best for presentation.

## Education

**Stanford University** (Center for Professional Development) - *Graduate Certificate in AI* 2017 - present

- AA274A Principles of Robot Autonomy I (Fall 2020) GPA 4.0
- CS234 Reinforcement Learning (Winter 2019) GPA 4.0
- CS231n Convolutional Neural Networks for Visual Recognition (Spring 2017) GPA 3.7 - Project: [Bounding out-of-sample objects](#)

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

- Final year research project - [Predicting Personality from Twitter](#)
- Information Retrieval and Data Mining Prize (research and poster session)
- [Best Undergraduate Research Group Project of the Year - Task Identification Using Search Engine Query Logs](#)
- 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

## Competencies

Python PyTorch MATLAB JavaScript C / C++ C# MediaWiki LaTeX Sibelius

## Spoken languages and personal interests

English Mandarin Japanese Malay Piano