

Michael Tsang

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Summary

Final year Imperial College student with a range of experiences in computer science from education, industry, and the wider community - including contributions to open source, teaching to young students, and development of applications from idea to product. Has a particular interest in functional programming and distributed systems.

Education

Imperial College London

London

MENG IN COMPUTING (PREDICTED FIRST CLASS)

Oct 2016 - Jun 2020

- Modules include: 81% Type Systems, 81% Distributed Algorithms, 79% Information and Coding Theory.
- Engineering Dean's List for top 10% performance in second year.
- Won Morgan Stanley Prize for top 12 first year students.

Work Experience

Jetstack

London

SOFTWARE ENGINEER INTERN

Apr 2019 - Sep 2019

- Completely rewrote the frontend of *Flightdeck* (a web application for Kubernetes training) to **Elm** best practices, facilitating and subsequently supporting the onboarding of a new frontend engineer.
- Contributed to *Cert-Manager*, the **open source Kubernetes** project for managing TLS certificates, becoming the 5th top contributor at the time.
- Co-led the design and implementation of *Aerodrome*, a platform for the provisioning of arbitrary environments to play *Flightdeck* training scenarios upon, building **Kubernetes controllers** in **Go** and making thorough use of **Docker** and **Google Cloud**.
- Participated in bi-weekly sprint planning, sprint retrospectives, and daily stand-ups, gaining industrial experience of **Agile** development.

Ocado Technology

Hatfield

TECHNOLOGY INTERN

Jul 2018 - Sep 2018

- Connected together several pieces of sensor hardware with several **computer vision** libraries to develop a single **C++** library with which to track the real time movements of a person.
- Developed the library into a **Javascript Electron** video conferencing application *robot-video-conf*, using **WebRTC** to transmit and map the movements to a remote, life-size, robotic upper body.

Projects

Aspect Based Sentiment Analysis (ABSA)

Available on GitHub

THIRD YEAR GROUP PROJECT

Oct 2018 - Dec 2018

- As a group of 6, developed a rule-based NLP solution for the extraction and storage of entity-attribute pairs with their calculated sentiment using **Python**.
- Showcased the use of the solution for sentiment aggregation in aiding the work of a financial analyst by building a demo application with a **RESTful Python** backend and **React** frontend.

Lembas

Available on Request

WEBAPPS GROUP PROJECT

Jun 2018

- In a group of 4, developed a full stack **React/Node/PostgreSQL** web application for the creation and sharing of balanced meal plans.
- Implemented **human-centered-design** techniques including user stories and micro-iterations for UX design from demoing and surveying potential users.

Extracurricular Activity

Imperial College London (Department of Computing)

London

PERSONAL PROGRAMMING TUTOR

Oct 2018 - Mar 2019

- Ran a weekly tutorial with a group of 8 first-year students to supplement their **Haskell** and **Java** learning, expanding their knowledge of algorithms and good software design practices.
- Marked and gave feedback to weekly assignments, highlighting mistakes and ways to improve.

Robogals London

London

TRAINING MANAGER

Apr 2017 - Apr 2018

- Regularly volunteered to teach groups of schoolchildren in workshops to program Lego robots, introducing them to the basics of programming.
- Prepared and led training days to on-board new volunteers.
- Designed new workshops and teaching materials to increase the range of skills taught by the society.