# **Guolin Yang**

### **Education**

Imperial College London, Computer Science MEng ⊗

Oct 2019 - Present | London, UK

- Expected First

Brighton, Hove & Sussex Sixth Form College (BHASVIC)

Sep 2017 – Jun 2019 | Brighton, UK

Mathematics (A\*), Further Mathematics (A\*), Computer Science (A), Physics (A)

# የ Skills

Technical Skills (Python Java Haskell C/C++ Javascript and React HTML/CSS SQL Scala)

Technologies (Git Linux MS Azure MS Bot Framework SDK MS Graph API Make)

Languages (English Cantonese Mandarin)

## Relevant Courses Taken

- Algorithm Design and **Analysis**
- Computer Vision
- Models of Computation
- Introduction to Machine Learning
- Mathematics II: Probability and **Statistics**
- Robotics

- Computational **Techniques**
- Network and Web Security

# **☐** Professional Experience

Bloomberg, Software Engineering Intern

Apr 2022 – Present | London, UK

- Optimised APIPUB infrastructure to reduce loads on individual machines
- Enable infrastructure to better handle unexpected market events
- Reduced capacity by ~10%
- Implemented numerous multi-way number partitioning algorithms

#### Imperial College Business School, Software Engineering Intern

Jul 2021 – Aug 2021 | London, UK

- Developed an MVP for MBA students from 6 universities around the world to learn mathematics and connect with human tutors to get real time support.
- Responsible for implementing a chat-bot using the MS Bot Framework SDK, MS Graph API and MS Azure.
- Utilised GitHub Actions for continuous deployment increasing efficiency of development.

# **Projects**

# **Cryptic Crossword Solver** $\mathscr D$

Oct 2021 - Jan 2022

- Extended two cryptic crossword solvers, built by Unlikely AI and a professor respectively, by making it more accessible to beginner solvers with a React frontend and a plethora of additional features such as auto-solve and hints.
- Implemented an image recognition feature to allow users to upload their own crosswords from a picture.

### A Really Smart Food App 🔗

Jun 2021 - Jul 2021

- Explored the main causes of food waste and possible solutions.
- Built a recipe website with the aim of reducing food waste.
- Employed the use of rapid iteration development, based on feedback from stakeholders, with a focus on human centered design.

### Duckie Town, eJass 2021 ∂

Mar 2021 – Apr 2021

- Investigated continuous software engineering in the context of IoT devices.
- Responsible for the automated remote deployment of new containers to duckie bots in St Petersburg and the Technical University of Munich.

Oct 2020 - Dec 2020

- Built a simple operating system from a bare bones framework, with a focus on concurrency and memory management.
- Implemented kernel threads, scheduler, loading and running user programs, and virtual memory

#### **ARM11 Group Project**

May 2020 - Jun 2020

- Implemented an ARM11 assembler and emulator tested with a memory leak checker and unit tests.
- Built an audio spectrum visualiser using FFTW and SDL which could be displayed on an LED matrix with a Raspberry Pi, as an extension.
- Top 5 Most Interesting Extension out of 47.

### H Extra-cirricular

- Member of the London Blockchain Labs' Lab Team
- GitCoin Kernel Fellow Block II
- Member of the Imperial College Football Third Team
- Volunteer staff at IC Hack 2019