

Ka Tin Mitch Lui

London, UK

mitch@ mitchlui.dev /linkedin
 /github

Born and raised in Hong Kong, I came to the UK 5 years ago to pursue a career in software engineering and I've successfully carved out a niche for myself in the payments industry by working at Wise and keeping myself informed of advancements in payment methods.

My skill set includes full-stack web development, efficient system design, meticulous attention to detail and the ability to rapidly acquire new knowledge. I'm currently learning iOS development to bring my game to the next level.

EDUCATION

University of Bristol

BSc Computer Science | Oct 2020 - Jul 2023

- **2022-2023**
 - Attained 78% in Security Behaviours by devising a cybercrime scenario involving social engineering and economic theory, where the attacker would mimic a recruiter to trick their target into downloading malware by offering an interview for an opportunity
 - Scored 70% in Computer Graphics after creating a C++ graphics renderer that can display and move a 3-D model using namely wireframing, rasterisation and ray-tracing techniques
- **2021-2022**
 - Awarded 75% in a group software engineering project for creating an event-triggered automation tool for IBM which was praised as "a substantial and professional product created using a mature and robust development process"
 - Received 74% in Golang coursework for writing concurrent and distributed solutions to Conway's Game of Life using channels, mutex locks (concurrent) and brokers (distributed) to split input into chunks to speed up workload by 50%
- **2020-2021**
 - Achieved 72% in the Java Object-Oriented Programming Scotland Yard coursework for implementing a backtracking algorithm and scoring method to decide computer player moves using Guava's ValueGraph library

SKILLS

Languages: Python, Java, Golang, C, Haskell, C++, Swift (basic knowledge)

Web Development Languages: HTML & CSS, JavaScript, TypeScript

Frameworks: FastAPI, Flask, Django, React.js, Next.js, Node, Angular (basic knowledge)

Database: MySQL, MongoDB, Redis

Others: Docker, Kubernetes, Amazon Web Services, IBM Cloud

TECHNICAL WORK EXPERIENCE

Graduate Software Engineer

Spend Business Experience Team, Wise, UK | September 2023

Software Engineer Intern

Spend Business Experience Team, Wise, UK | June 2022 - September 2022

- Worked with the team to deliver the web frontend experience for new features, e.g. business card cashback and consumer rewards
- Independently created and owned the backoffice tool that is used by over 2000 customer service agents to answer queries about aforementioned features
- Implemented a feedback form for cardholders to give feedback directly to a dashboard
- Contributed to multiple projects e.g. custom business debit card logos and the ability to edit card delivery address on web, reducing over 300 customer service contacts a month
- Assisted engineers in refactoring codebases, refreshing animation assets and user interface, resulting in parity of features between all platforms

Software Engineer Intern

Asiabots Limited, Hong Kong | Jun 2020 - Sep 2020, periodically throughout 2021 (Part-time basis)

- Collaborated with the CTO and COO to develop over 25 chatbots, voicebots and other software for a number of clients such as Cathay Pacific, AIA Insurance and DBS Bank with minimal oversight
- Conceptualised and coded the infrastructure for first generation of bots to provide cross-platform, cross-medium (text / audio) compatibility and client-customisable conversation flows, eliminated need for multiple repositories for individual bots
- Devised and deployed a backend for an admin panel so clients can spend credits to generate human-like speech using text
- Led the migration of numerous Flask APIs to FastAPI and implemented schema validation, session management on multiple workers using Redis
- Improved usage analysis tools which reduced development time and lowered operating costs by 5%

"Mitch has excellent communication skills, extremely organised, reliable and computer literate. In addition, he has displayed a maturity, motivational level, and seriousness of purpose which I have rarely encountered with college students."

Isaac Wong, COO of Asiabots Limited
Taken from reference letter (available upon request)

OTHER WORK EXPERIENCE

Graduate Teacher (Level 2)
University of Bristol, UK | September 2021 - June 2023

- 2022/2023:
 - Lead TA for the group software engineering project in second year, managing GitHub enterprise access for over 200 members and mentoring groups
 - Continued hosting weekly seminars for first year students
- 2021/2022:
 - Hosted weekly seminars with small groups of students covering all content from year 1, e.g. programming in C and Haskell
 - Prepared for sessions by reading through worksheets and solutions every week, resulting in ability to communicate concepts and keep students engaged
 - Nominated for the Inspiring and Innovative Teaching (Team) Award for creating an active and interactive environment inclusive of all learners by allowing space for experimentation, risk taking, and learning from making mistakes

Student Laptop and Mobile Clinic Technician (September 2021 - June 2022) / Supervisor (June 2022 - Jan 2023)
University of Bristol, UK | September 2021 - January 2023

- Responsible for giving 1st and 2nd level IT support, diagnosing and solving software-related issues for students, specialising in resolving tickets involving macOS and Linux-based systems
- Gathered and documented knowledge in wiki given by senior staff In addition to personal experience from asking as many questions as possible during triage, allowing me to complete tickets more efficiently

ACHIEVEMENTS AND ACTIVITIES

University of Bristol CSS x Boeing Hackathon 2022
Honourable Mention | Feb 2022

- Created GreenMap, a navigation platform that aggregates data from multiple transit providers such as Voi and TransportAPI to show carbon emissions for journeys to encourage more informed choices during travel
- Built using React as the frontend and FastAPI as the backend

University of Bristol BEEES Make-a-thon
Overall Best Prize, Verification / Validation Prize, Gamification Prize | April 2021

- Created a Proof-of-Concept application in Python and OpenCV for real time detection of persons wearing face coverings
- Programmed a highly accurate (99%) binary classifier model using a neural network built with Keras and Tensorflow and enabled detection of various types of masks while preventing circumvention via covering face with hands, t-shirt etc

CERTIFICATIONS

Amazon Web Services Certified Cloud Practitioner (CLF-C01)
Issued February 2021 (Score: 828/1000)

- Obtained using knowledge gained while working for Asiabots Limited developing and deploying containerised applications on Lambda and EC2, maintaining digital assets on S3 in addition to independently learning about core AWS services, security architecture and pricing using an online learning platform

LANGUAGES

English (IELTS: 8.0 / Fluent) Cantonese (Native) Mandarin (PSC: 3A / Fluent) French (DELFI: A2 / Basic)