



# Michael Lee

Software Engineer

 Hong Kong

 <https://michaellee8.com>

 English, Chinese



## BACKGROUND

### ABOUT

- Strong interest on engineering backend systems, particularly low level, distributed, networking and optimization stuffs.
- Strong skills across the full application and web development stack, including frontend, backend, mobile and devops.
- Worked 3 years in a full-time software engineering role across different fields remotely.
- Extremely fast learner, from never touched native mobile development to developing and maintaining mobile SDKs on multiple platforms in less than 10 months fyi.

Please see my website and GitHub profile for personal and open-source projects I have worked on.

### WORK EXPERIENCE


#### **Software Engineer, Web3Auth**

Aug, 2021 - Jun, 2022  10 months

Web3Auth is a distributed private key management solution. By abstracting the management of private keys away from the end user, we allow users to start making use of blockchain applications using familiar authentication methods like Google or Facebook login. Our goal is to allow any digital identity to be a valid cross-platform identifier, allowing users to bring their digital identities with them to any application on the Internet.

- Development of full suite of mobile SDKs on Android, iOS, Flutter and React Native, for Web3Auth and CustomAuth. From never touched native mobile development to developing across the whole mobile stack in 10 months.
- Developer relation and support from client developers for integrating our SDKs, troubleshooting across the full stack, from blockchain nodes written in Go, backend services written in Node.js, frontend webapps written in Vue.js and React.js, to mobile SDK written on the aforementioned languages.
- Created the react-native-web-browser package, which allows the same API to be used for opening browser sessions in both Expo and bare React Native apps. Reducing React Native related support requests by at least 50%.

#### **Junior Software Analyst, TFS Info-Tech Company Limited**

Aug, 2019 - Jun, 2021  1 year 10 months

In TFS, we were building a highly concurrent game system that is expected to stream live video feed and then accept input to a large amount of players. I am responsible for developing the Golang-based microservices system.

- Contributed to the initial proposal of the high concurrency microservices architecture, using RabbitMQ as a message broker to serve a large amount of concurrent external connections, and gRPC for internal low latency communication, with MySQL as database and Redis as cache and secondary low latency database, mainly implemented with Golang with additional Javascript libraries provided for frontend consumption. Previous load testing indicates a concurrent peak loading of at least 10K users when backed with message brokers and databases with sufficient capacity.
- Implementing a low latency and highly efficient custom authentication system for the RabbitMQ broker, backed by Redis.
- Providing a rigidly tested, well-structured system with reusable modules to draw different graphs based on the current state of the system.
- Implementing additional features and bugfixes on a MySQL-backed content management system, across different services.

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### Part-time developer, HKU e-Learning Development Laboratory

May, 2018 - Jun, 2019 ⌚ 1 year 1 month

- Development of the iClass Parental Control System mobile app, which provides parents an interface to control their own kids' devices, in React Native.
- Further development and maintenance of the iClass Mobile Management and Learning Management System service, utilizing Node.js, PHP and MySQL.
- Development and deployment of the iClass Student Information System, utilizing PHP, MySQL and Docker.



## SKILLS

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### Golang

Golang Go

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### Linux system

Linux Bash Vim Tmux

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### Flutter

Flutter

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### Node.js

Node.js Javascript

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### React.js / React Native

React.js React React Native

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### SQL

MySQL PostgreSQL

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### Redis

Redis

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RabbitMQ

RabbitMQ



## EDUCATION

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**Computer Engineering, Bachelor**, University of Hong Kong

Sep, 2018 - Dec, 2022



## CERTIFICATES

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**Amazon Web Services Cloud Practitioner**, Amazon Web Services (AWS)

Issued on: Feb 22, 2023



## AWARDS

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**Sliver Medal in Hong Kong Olympiad in Informatics**, The Hong Kong Association of Computer Education

Awarded on: Jan 01, 2016

A programming competition focused on algorithm building, achieved during my secondary school days.

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**Finalist in J.P. Morgan Code For Good 2022**, J.P. Morgan Chase

Awarded on: Sep 01, 2022

One of 4 finalists out of 12 teams in the hackathon of providing solutions to NGO problems



## INTERESTS

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**Mobile / Computer games**

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**Watching movies**