

# Michael Chun Chi Tsang

[miklcct@gmail.com](mailto:miklcct@gmail.com)

<https://miklcct.com/>

<https://github.com/miklcct>

+44 7460 275645

## Skills

- Transport technologies: OpenTripPlanner, GTFS, ATOC CIF
- Programming languages: PHP, Typescript, Javascript, C++, Java, Dart
- Frameworks: Laravel, Symfony, Node.js, Vue.js, Flutter, React.js
- Platforms: Web (including Progressive Web App), Android
- Database: MySQL / MariaDB, T-SQL, MongoDB
- Networking: IPv4 and IPv6 (HE.NET IPv6 Certified Sage), DNS, DHCP, HTTP, FTP, SSH
- DevOps: Git, GitLab, Docker, Linux server administration, UN\*X shell scripts
- Languages: English, Cantonese

## Work experience

Full Stack Software Engineer at [Jnction](#)

Mar 2023 – Present

- Rewritten [Aubin](#) to work with OpenTripPlanner, which enabled the customisations required to give autistic users' confidence in travelling, including customising walking speed and additional interchange times, and added station information of National Rail train stations.
- Improved the front end of TPR Analysis Tool used by Network Rail, which is used to analyse the problems of the timetable planning rules through analysis of train running data
- Made improvements in TPI Fringe Configuration, which improved the service counts with fully contiguous berth sequences on the LNER network from approximately 20% to 80%

Software Developer at [IT Wake Limited](#) ([HKU e-learning lab](#))

Oct 2016 – Oct 2017 / Oct 2018 – Oct 2020

- Developed the backend API for iTrain platform, a corporate training solution used by multiple companies including Chow Tai Fook, Prudential ([IIQE YiKaoTong](#)), FSE Engineering, HKFsPA, Bank of China
- Built using Laravel with compatibility on multiple OSes and databases, extending the framework classes to provide customised behaviour
- Made a Docker image and Docker compose script with automated testing with PHPUnit on GitLab
- Served Android and iOS mobile applications, and web frontends using Angular

Software Developer (internship programme) at [Bull.B Technology Limited](#)

Jun 2015 – Aug 2015

- Started developing the web site for Easy One (<http://www.easyone.com.hk>)
- Used modern web technologies including HTML5, CSS3 and Javascript
- Built on [Laravel](#) and [Bootstrap](#)

## Products

National Rail timetable on the web (<https://gbtt.uk/>)

Oct 2022 – Nov 2022

- A PHP-based website showing National Rail timetable in HTML form
- Timetable links can be bookmarked directly
- The first website to show train timetables in traditional format using updated journey planner data
- Handed over to Metroapps Limited for further development

Web interfaces for [KMB & LW](#) ETA

Jan 2020 – Apr 2021

- Written using Javascript as a single page web application
- User choices in the web application can be bookmarked directly as a URL
- Addressed deficiencies of the bus companies official apps by using reverse-engineered APIs
- Clear separation of UI and logic into a frontend application and a library

Hong Kong TrailO Information Site (<https://trailo.hk/>)

Jan 2018 – Present

- A fully bilingual website powered by WordPress, with Chinese and English on equal status.

## Education

The University of Hong Kong, [BEng\(Computer Science\)](#) (in conjunction with BBA(IS))

Sep 2015 – Jul 2016

- First class honours
- Graduation GPA 3.68

The University of Hong Kong, [BBA\(Information Systems\)](#)

Sep 2012 – Aug 2015

- Double major in Information Systems and Computer Science
- Second class (upper) honours
- Graduation GPA 3.55
- General secretary of Bridge Club, HKUSU, Session 2013 – 2014
- Member of competitive programming team “Provinci”

## Awards and achievements

- English Channel solo swimmer (CS&PF, 2023-09-07)
- Hong Kong Team member in World Trail Orienteering Championships 2017, 2018, 2022
- 2<sup>nd</sup> place in Egypt International Trail Orienteering Championship 2018
- Hong Kong delegate in 13<sup>th</sup> World Scout Youth Forum (2017)
- Champion in Hong Kong Trail Orienteering Championships 2016 (TempO)
- 1<sup>st</sup> runner-up in Hong Kong Trail Orienteering Championships 2016 (PreO)
- Champion in ACM-HK Programming Contest 2015 (team BIG BOSS)
- 3<sup>rd</sup> place in ACM/ICPC 2012 Hanoi Asia (team IT Genius)
- Bronze medal in International Olympiad in Informatics 2011 and 2012
- Silver medal in National Olympiad in Informatics 2011
- Gold medal in Hong Kong Olympiad in Informatics 2008 – 2012 (best young contestant in 2008 and 2009)