## Wong Ka Chun, JOE

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https://github.com/kcwongjoe

### Profile

- Currently living in UK
- Professional in software development; electronic circuit design; MCU programming; algorithm implementation; etc.

### Skills

- **Programming:** C, C++, C#, Java, Python, Android (Java, C++)
- **GUI Design:** QT5, JavaFx, WPF
- Back-end development: Spring, Django, php
- Front-end development: HTML5, CSS, JavaScript
- Database: MySQL

- Electronic circuit design
- MCU Programming: FreeRTOS in STM32, SPI, I2C, RS232, FatFs.
- Math: Statistics, Image processing, Geometry
- Mathematics Programming: R, MATLAB
- Operating systems: Windows, Linux
- Management Tools: CMake, Doxygen, PlantUML

## ■ Certification

International Software Testing Qualifications Board (ISTQB) Certification - Foundation Level

## Work experiences

#### **Software Engineer**

9/2021 - present

Canon Medical Research Europe (CMRE)

- Majorly maintenance software in the medical ultrasound machine in a software development life cycle.
- Mostly working on software testing, defect fixing and feature development in c++

Lead Engineer 3/2020 – 7/2021

Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI)

Worked in a Diamond Classification project which:

- Developed an Android app (Java, C++, OpenCV).
- Software development for hardware control and GUI (Image processing skills, MCU, C++, QT5).

Senior Engineer 10/2019 – 3/2020

Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI)

As the sole software and hardware engineer in my team, I have worked on a 3D scanning system project which:

- designed a Stereo UV camera system.
- designed a circuit for the system components controlling
- developed GUI (C#, WPF).
- implemented 3D reconstruction algorithms and designed the calibration (C++, Geometry).

Software Engineer

Sapiens Environmental Technology Co Limited

4/2019 - 9/2019

- Full-stack development for controlling air pollution sensors and data visualisation (Java Spring Boot, JavaScript, HTML5, CSS and MYSQL).
- Programmed framework to control pollutant sensors. (MCU, STM32, RTOS)
- Developed software to communicate with the sensor. (Python)

**Research Assistant** 10/2018 – 12/2018

Division of Environment and Sustainability, Hong Kong University of Science and Technology

• Developed data visualisation system for the IoT sensing project (Java Spring Boot and MYSQL, HTML5, CSS, JavaScript, Bootstrap, ¡Query and d3.is).

#### PhD research project

10/2013 - 8/2018

School of Energy and Environment, City University of Hong Kong

Participated in several air pollution measurement projects such as:

- Systems design in PC and android. (Java)
- Circuits design that involve sensor communication, device control, and power conversion. (Electronic, MCU, STM32)
- Data analysis (Statistics)

## Education

### **Doctor of Philosophy in Energy and Environment**

9/2013-7/2019

School of Energy and Environment, City University of Hong Kong

# **Bachelor of Engineering (Honours) in Electronic and Communication Minor: Atmospheric and Climate Science**

9/2009-7/2012

Department of Electronic Engineering, City University of Hong Kong