

# JIACHENG WU

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GF No.130, Tai Po Tsai Village, Clear Water Bay Road, Sai Kung, New Territories, Hong Kong

## EDUCATION

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**Hong Kong University of Science and Technology** *Sept. 2022 - Now*  
*MSc in Electronic Engineering, School of Electronic and Computer Engineering*  
**CGA:** 3.8  
**TGA:** 3.8

**The Chinese University of Hong Kong, Shenzhen** *Sept. 2018 - May 2022*  
*B.ENG. in Electronic Information Engineering, School of Science and Engineering*  
**Major GPA:** 3.2/4.0  
**Cumulative GPA:** 3.2/4.0  
**Languages:** English (Advanced), Mandarin Chinese (Native)  
**Honours:** Bachelor of Engineering with Honour, Second Class Upper Division; Computer Association Scholarship; Third prize on World Drone Championship Campus Tour

## RESEARCH EXPERIENCE

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**Develop An On-bike Posture Recognition Model for Road Cycling based on Computer Vision** *Sept. - Nov. 2022*  
*Research Assistant* *HKUST*

- **Instructor: Prof. Xin Zhang**
- Learned deep learning and other related knowledge from scratch.
- Independently investigated papers and codes to finalize the database and model used.
- Implemented different models to recognize cyclist posture in real-time by the depth camera and get the data of orthographic projection area.
- Realized the function of recognizing the athlete's gesture and feedback in real time.

**Develop Humanoid Robot Project** *May - July 2021*  
*Research Assistant* *CUHKSZ*

- **Instructor: Prof. Jian Zhu**
- Helped implement and adjust the parameters of the eyes applied in the humanoid robot.
- Be Responsible for the code development of the eyes so that they can recognize and track faces automatically.

**Robotic Mecanum Wheel Trolley Project** *Jan. - May 2021*  
*Code Writer & Assembler, Student Robotic Association in RIM Lab* *CUHKSZ*

- **Instructor: Prof. Zhenglong Sun**
- Assembled the trolley with teammates and wrote the code to make the trolley automatically recognize the specific color blocks and grab them to a particular place.

**Deep Learning-Based Model-Free Source Localization Project** *Sept. 2020 - Mar. 2021*  
*Research Assistant* *CUHKSZ*

- **Instructor: Prof. Junting Chen**
- Integrated papers to get the Heatmap method to solve the localization problem.
- Generated heatmap samples to create the dataset to overcome the problem of the model-free outdoor sources.

- Applied the CNN model to the heatmap problem and successfully located the illegal radio stations in the urban environment with the received radio signal strength through machine learning.

## HANDS-ON EXPERIENCE

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### Electronic Circuit Design Projects

Sept. - Dec. 2019

*Project Leader, Electronic Circuit Design Laboratory (A-)*

*CUHKSZ*

- **Instructor: Prof. Zhenglong Sun**

- Used software to design circuits and implement circuit on the board to solve the certain problems.
- Measured and verified the results to learn the knowledge learnt from the textbook.

## TECHNICAL STRENGTHS

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### Coding

Python, MATLAB, C++, Julia, Java

### Machine Learning

PyTorch, TensorFlow

### Integrating and Writing

LaTeX

### Circuit Design and MCU Programming

STM32F103, ARDUINO UNO, FPGA