

# 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*

**The Chinese University of Hong Kong, Shenzhen** *Sept. 2018 - May 2022*  
*B.ENG. in Electronic Information Engineering, School of Science and Engineering* *Shenzhen*

**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 (Independent Project)* *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.

**Develop Humanoid Robot Project** *May - July 2021*  
*Research Assistant (Face part)* *CUHKSZ*

· **Instructor: Prof. ZHU, Jian**

- 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 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. SUN, Zhenglong**

- Assembled the trolley with teammates and wrote the code to make the trolley automatically recognize the specific color blocks and grab it to a certain place.

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

· **Instructor: Prof. CHEN, Junting**

- Integrated 10 papers to get the 'Heatmap' method to solve the localization problem.
- Generated 10000 heatmap samples 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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- **Instructor: Prof. SUN Zhenglong**
- 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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|---|----------------------------------|
| <b>Coding</b>                             | Python, MATLAB, C++, Julia, Java |
| <b>Machine Learning</b>                   | Python(Pytorch), Python(Sklearn) |
| <b>Integrating and Writing</b>            | LaTeX                            |
| <b>Circuit Design and MCU Programming</b> | STM32F103, ARDUINO UNO, FPGA     |