

# Ji Yang Zhang

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*Students with knowledge of method design, process development, and prototyping. Aiming to find a place to validate my abilities and use my abilities to successfully fill the vacancy in your team. I am often praised by my colleagues for being hardworking and taking the time to learn unfamiliar business as quickly as possible. You can count on me to help your team achieve its goals.*

## SKILLS

- Mainstream office software (MS Office, VS Code, Zoom, etc.)
- Embedded System (Arduino, RaspberryPi, STM32)
- PCB design (Altium Designer, Ansys HFSS and Smith)
- Programming (Java, Python, C, Bash, MATLAB and VHDL)
- Communication protocol (USART, i2C, and SPI)

## LANGUAGES

- French: ██████████ Fluent
- Mandarin: ██████████ Native
- English: ██████████ Advanced

## EXPERIENCE

### **Embedded Hardware Engineer, Internship**

*BDE Technology, Inc. (Texas Instrument certified module provider), Guangzhou, China*

*May 2023 - Aug 2023*

- Performed manual surface mounting of PCB samples sent to customers using tools such as heat guns, soldering irons, and heating stations.
- Improved PCB module reliability by testing and debugging with spectrometers and network analyzers.
- Drove project success independently, from documentation and design to simulation, drafting, ordering samples, and testing, enhancing operational efficiency.

## EDUCATION

### **Bachelor of Engineering in Electrical Engineering, Honor Program**

*McGill University, Montreal, QC*

*Aug 2022- Expected graduation Dec 2025*

## PROJECT

### Amazon Sidewalk Module

*-- Jul 2023*

- Design a PCB module consisting of three chips (CC1352P7, CC1307R and CC1190) from Texas Instruments and their datasheets to join the Amazon Sidewalk network.

### Automatic delivery robot

*-- Apr 2023*

- Spearheaded a team of 6 individuals to successfully develop an automatic delivery robot utilizing BrickPi, Raspberry Pi, LEGO Mindstorm Ev3, and Python, enhancing team collaboration and productivity.
- Delivered comprehensive development documentation, including requirements and test documents, optimizing project organization, and facilitating seamless implementation.

### Portable guidance system for people with visual impairments

*-- Apr 2022*

- Engineered a portable guidance system for individuals with visual impairments, leveraging the Arduino UNO system and its software, enhancing accessibility and safety.
- Implemented a rotating ultrasonic sensor to detect obstacles in the front, triggering alarms for prompt obstacle avoidance, ensuring user safety and confidence in navigation.

## AWARDS AND CERTIFICATE

- ASP Construction Certificate.
- Micro-Wil Project Management Activity Alstom – Bell 2024.
- Top 25% in the 2019 Cayley mathematic competition.