Zihao Pu

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EDUCATION

University of British Columbia (UBC)   **Vancouver, Canada**

Bachelor of Applied Science in Electrical Engineering   *Sept. 2018 - May 2023(Expected)*

Honors: Dean's Honour List, ECE, UBC Vancouver 2021&2020, Outstanding International Student Award Vancouver, 2018

PROFESSIONAL EXPERIENCE

HUAWEI TECHNOLOGIES CO., LTD   **Shenzhen, China**

Hardware Technology Engineer (Intern)   *Jul. 2021 - Apr. 2022*

- Participated in Optical Line Terminal (OLT) hardware design group.
- Fully participated in a product design process from start to end, including design, verification, documentation and product release.
- Especially in charge of FPGA/CPLD glue logic development and testing in multiple products.
- Introduced and designed several design-automation processes, helped the team improve its efficiency.
- Wrote design specifications, reports, and release documentations for communication and product release.
- Hardware test and validation using multimeters, oscilloscopes, spectrum analyzer, logic analyzer, and phase-noise analyzer.

PROJECTS

Fully Simulated SCARA Robot   *Jan. – Apr. 2021*

Embedded Developer, PCB designer, System Designer

- A 3.5 Degree of Freedom SCARA Robot using parallel design. The design process used SolidWorks, Fusion 360, Multisim/Ultiboard, and the co-simulation process used MATLAB, Simulink, SimulationX.
- Implemented the Arduino embedded code, and found a method to measure the performance.
- Implemented interactive simulation model, where we are the only team succeed.
- This project received a standout praise.

Coin Detecting and Picking Robot   *Mar. – Apr. 2020*

Project Leader

- Leading a 5-member group developed a car-like coin detecting & picking robot
- Designed the system architecture, educated team members to familiar with it.
- Designed the program to control motor, detecting coin, and control arm.
- Designed hardware and software of a remote controller using 2.4GHz signal transceiver module as a feature.
- Wrote the whole report.
- The project received 100% grade in the course.

Reflow Oven Controller   *Feb. – Mar. 2020*

Project Leader

- Leading 6-member group designed, developed a reflow oven controller based on a kitchen oven to solder SMD PCB.
- Designed a compact, reliable program using MCU-51 assembly language on LPC3951.
- Designed features including reflow soldering process, user-set profile, dedicate user interface and uplink to PC through serial port.
- The project received 100% in the course.

Professional SKILLS

Technical：

- Data processing: MATLAB, Python
- FPGA/CPLD Application: Intel Quartus, Lattice Diamond, Anlogic TD, Pango PDS
- Embedded System Design: STM32, Arduino, MCU-51, C, C++
- Circuit Design: Multisim/Ultiboard, KiCad

- 3D Design: Fusion 360, Shapr
- Robotics: PID Control, Motor Control and Rotary Encoder
- Version Control: Git
- Technical Writing and Communication skills
- Design Simulation: MATLAB/Simulink, LTSpice, Multisim, SimulationX
- Equipment: Oscilloscopes, Function Generator, Soldering, Multimeters