

Amanda Tong

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TECHNICAL SKILLS

- AutoCAD
- C++
- HTML5/CSS
- Java
- Python
- Arduino
- Git and VS Code
- Circuit analysis/design
- Microsoft Office

GENERAL SKILLS

- Leadership
- Problem-solving
- Teamwork
- Adaptability
- Communication
- Time-management

PROJECTS

Energy Saver Electricity Usage Monitor - In Progress

Technologies Used: STM32-F401RE Micro Controller, Split-Core Current Transformer, Breadboard kit

- Collected 2 months of research on scientific concepts such as Hall Effect, AC/DC Electricity, Power, and Ohm's Law to build a energy usage monitor that can calculate and output the power usage of house appliances per week
- Developed a pitch memo and a detailed design document that included the purpose of the device, the scientific research conducted, and **block and circuit diagrams** I designed to visualize our desired system

Two-Player Ping Pong Game - NOV 2021

Technologies Used: Java

- An interactive two-player ping pong game
- Used **OOP**, **Java GUI** and animations, key listener events, learnt a custom-made library (SuperSocketMaster)

GitHub Personal Website - JAN 2023

Technologies Used: HTML, CSS

- Implemented HTML layout methods and CSS animations/transitions to build a dynamic website
- Demonstrates creativity and strong ability to work, learn, and maintain high-quality of work independently

WORK EXPERIENCE

STEM/Coding Camp Counsellor - Code Ninjas - JUL 2022 - AUG 2022

- Presented **Microsoft** PowerPoint slide deck to a class size of 15+ campers, introducing them to STEM-related topics such as **Roblox** 3D modeling, robotics, and **Scratch/Minecraft** coding
- Guided one-on-one lessons to a class of 5 campers ages 6-9 on activating buzzers and LEDs in Lego creations through block code, resulting in 2x more participation

Team Member - Tim Hortons - SEP 2021 - JUL 2022

- Took orders, handled cash and electronic payments, and answered customer inquiries in-store and at drive-thru
- Improved quality food service to customers through strong communication and coordination with a team of 4-5 in 3-hour rush-hours

Teacher's Assistant - Studio 51 Drama and Public Speaking - SEP 2019 - MAR 2020

- Assisted teachers by supervising and leading weekly class performances to prepare students, ages 6-12, for annual drama showcases and competitions
- Greeted parents, handled studio inquiries and processed cash payments at the front desk

EXTRACURRICULARS

Midnight Sun Solar Car Hardware Team Member - University of Waterloo - OCT 2022 - CURRENT

- Completed hardware onboardings and watched team-made hardware videos to strengthen knowledge in electrical circuits and an introduction to **PCB design and layouts**
- Developed basic knowledge in Altium Designer

EDUCATION

Electrical Engineering Program - University of Waterloo
Expected to Graduate in 2027

LANGUAGES

English - Fluent Cantonese - Fluent
Mandarin - Fluent