Matthew Tan

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in matthew-tan-canada

About Me

I am an application and script developer and I am currently working on my Keyboard Project. Some of my hobbies include hardware design, building PCs, gaming, and scuba diving.

Languages and Other Software

- Office 365
- Excel VBA
- C++ (and Arduino)
- KiCad (PCB Design)
- VHDL
- C
- Python (and Selenium)
- C# (Unity and .NET Core)
- Java
- Git

Skills

- Project Management and Teamwork
- Adaptability
- Problem Solving
- Communication

Education

University of Waterloo,
Computer Engineering
09/2019 – present | Waterloo, Canada
3.9 GPA

Projects

Keyboard PCB Project, *C++, KiCad*
A SMD-soldered 67-key keyboard with a custom designed PCB (ATMega32U4) and powered by QMK Firmware

Python Parallel Port Controller (DB25), *Python*
A series of LEDs and input buttons controlled by a DB25 connector programmed with Python to simulate a game

Arithmetic Logic Unit Implementation, *VHDL*
A simple Arithmetic Logic Unit (ALU) implemented on an Altera Max 10

Unity 2D Project, *C#*
2D Unity Game with time manipulation and tracking elements, coded with C# scripts

Professional Experience

Focused Improvement Consulting,
Junior eLearning Developer
07/2020 – 09/2020 | Oakville, Canada
- Scripted and used WordPress pages (PHP) and plugins for an interactive eLearning website.
- Developed online lectures and edited lecture videos for a mixed-learning online course.

Aritao Cable, *Fiber Optic Technician*
07/2019 – 08/2019 | Aritao, Philippines
- Hands-on experience in cabling layout and infrastructure development, while communicating any issues that arise to the supervisor.
- Configured a Gigabit Passive Optical Network (GPON) using an Erbium-Doped Fiber Amplifier (EDFA) and an Optical Line Terminal (OLT) at the headend, and Huawei Optical Network Units (ONU) at clients.

Mathnasium, *Math Instructor and Script Developer*
08/2018 – 03/2019 | Mississauga, Canada
- Worked in a team with 4 other instructors to teach K-12 Math, from basic counting to calculus and vectors, to middle school and secondary school students.
- Developed Visual Basic (Excel VBA) weighted sorting scripts to group students based on their math abilities, leading to effective targeted learning.