Le Zhang

3A Honours Physics | Computing Minor

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Education

University of Waterloo (Undergraduate) 2021-Present

- Candidate for Bachelor of Science, Honours Physics
- Candidate for Computing Minor

Qualifications

- Excellent ability to build the program by **Python**, **C/C++**
- Master in web related programing **HTML**, **CSS**, **JavaScript** and **SQL**
- Capable of **CUDA programming** uses **PyTorch** for deep learning model training
- Familiar with developer tools of **Linux**, **Git**, **Shell Script**, **Vscode**, **PyCharm**
- Skilled in audio and visual editing by **Photoshop**, **Final Cut Pro**, **Logic Pro** and **Davinci Resolve**

Work Experience

1. **Website Maintainer** Faculty of Engineering - University of Waterloo (Canada) 09/23-12/23
   - Maintain the content of the website contents by UW Development Kit with knowledge **HTML/CSS/JS**
   - Ensure website responsiveness and accessibility on various devices
   - Work with other students to maintain sites that is gained organized working style
2. **Audio-visual Events Assistant** ITMS - University of Waterloo (Canada) 01/23-04/23
   - Recording and editing with professional video equipment/software **Final Cut Pro**
   - Develop basic equipment managements software construction by **Python**
   - Working with live PA system by **Multichannel Audio Mixing**

Projects

1. **Data Analysis & Deep Learning by Python** 2023
   - Develop data processing programs by Python with **Numpy**, **Scipy**, **Matplotlib** and **PyTorch**
   - Using **CUDA programing** for deep learning model training
   - Using deep learning to predict the future trend based on existing data
2. **Classic Electrical Games Development** 2023
   - Develop E-games with graphic user interface by **Pygame** module in **Python** library
   - Develop game logic processing modules in **C/C++** to boost data processing efficiency and build **API** that can be easily called in Python environments
3. **Computational Physics Simulation** 2021 - Present
   - Build models using knowledge of physics and mathematics by **Python**, **C/C++**
   - Develop **muti-threads** algorithms to improve simulation efficiency
   - Validate simulation results and use visualizations by **Matplotlib**
4. **Website Develop & Server Maintenance** 2017 - Present
   - Develop the website handle concurrency and parallelism by using **HTML**, **CSS**, and **JavaScript**
   - Set up **MySQL** database to handle the data processing and store
   - Deploy the server environment independently, e.g. **nginx** and **Python**

Activities and Awards

- Excellent Academic Standing | 2021-2023
- First Robotic Competition – General Motor industrial design award | 2018