# **Ghanem Ghanem**

ghanemghanem.me

☑ ghanemxghanem@gmail.com

nghanem025

**519-566-8089** 

## **EDUCATION**

# University of Windsor (Expected Graduation: August 2023)

Windsor, Canada

Bachelor of Computer Science (Honours) with Software Engineering Specialization (Minor in Mathematics)

## **SKILLS**

- Programming Languages: Python, C, C++, Java, Kotlin, HTML/CSS, JavaScript, Bash.
- Frameworks: Django, Flask, Sanic, Spring Boot, Android Studio, GTK4.
- Software Tools/Other: Git, Gitlab, MySQL, Docker, AWS, VIM, REST APIs, Linux, JSON, CURL.

#### **EXPERIENCE**

### Software Developer Intern

Waterloo, ON

Clearpath Robotics

May 2022 - Sept 2022

- Developed a web server using the Python asynchronous web framework Sanic (similar to Flask).
- Implemented Gitlab CI pipelines for end-to-end testing making sure all my endpoints were working.
- Created a website using HTML, CSS and JavaScript. This was used for my server to display logs and package data.
- Developed **Python** websockets and **JavaScript** websockets to have two way communication between the front-end (website) and back-end (server).
- Implemented a **Docker** image and **Bash** Script that would create a minimal container for aws-fleet accounts, this was used to deploy robot simulations.

#### **Software Developer Intern**

Waterloo, ON

Clearpath Robotics

Jan 2022 - May 2022

- Coordinated with a team of developers on biweekly sprints to develop our next-generation builds, based on the functional package manager **Nix**.
- Developed **Python** programs that automate the workflow of building, testing, using and updating multiple software packages.
- Developed a Python program that automates the use of Doxygen, Pydoctor and Sphinx to generate documentation for C,
  C++ and ROS programs.

Web Developer Windsor, ON

University of Windsor

May 2021 – Sept 2021

- Developed and published Ebooks using Pressbooks. Customizing the site using HTML, CSS and JavaScript.
- Published a site for students using WordPress, with a combination of HTML, CSS and JavaScript to change the design of the site. Site was used to upload Ebooks and OERs for students.

## **PROJECTS**

#### Django Store Website ( Python Project )

Github link

- Created a website in Django that had three models, Products, Stores and Customers.
- Implemented a form for products, stores and clients. Forms where used to input values such as name, price, location, summary and description.
- Developed a function that would get all the objects in products and list them on the site, this was done using a combination of **Python**, **HTML** and **CSS**.
- Implemented a search algorithm to identify customers/products, this was done using HTTP Methods GET and POST.

Video decoder in C Github link

- Developed a multi-threaded video decoder with audio using C, FFmpeg, PulseAudio simple API and GTK4.
- Implemented decoder using pthreads with a mutex lock. The video is played using GTK4