

# Matthew Salazar

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## EDUCATION

### B.ENG Computer Engineering

UNIVERSITY OF GUELPH

Coursework: Data Structures, Digital Systems Design

Guelph, ON | Sept 2022 - May 2027

## PROJECTS

### ROBOTIC HAND

ARDUINO, C++, SOLIDWORKS, FRITZING

A fully functional robotic hand with the ability to precisely replicate finger motions in real-time, enabled by wireless feedback and with minimal latency. The project featured two modes, including user control and cycling of preset gestures. An LCD beneath the base of the hand allowed for visual cues of the mode and the angle at which each finger is bent.

### FILE PROCESSING SYSTEM

JAVA, OBJECT-ORIENTED DESIGN, GIT

Developed a file processing system with a team, that is able to execute customized scenarios based on user input. Made the system to accept text files in JSON format as the input for each processing scenario. The program would output a list of files that met the given condition.

### CRYPTOMAGIC

C, GIT

Given a text file I was able to create a program that encrypted the contents within the file with a custom encryption method, the program was also capable of decrypting.

### ALARMBOT

PYTHON, GIT, DISCORD API

Developed an alarm bot leveraging Discord's API and asyncio library. The program ensured timely notifications for impending exams and tests. By seamlessly integrating with Discord.

## WORK EXPERIENCE

### SUMMER STUDENT | UTILICON ENGINEERED PRECAST STRUCTURES

Bradford, ON | May 2023 – Sept 2023

- Prepared moulds for concrete pouring by creating rebar foundation, cleaning and oiling.
- Achieved a smooth finish to the product by vibrating and floating the concrete.
- Performed general maintenance duties.

## COMMUNITY INVOLVEMENT

### BIG BUDDY | UNIVERSITY OF GUELPH ENGINEERING SOCIETY

Guelph, ON | Sept 2022

- Provided guidance and mentorship to incoming computer engineering students, by sharing my own experiences and facilitating open discussions.
- Created a supportive environment where engineers could connect and build relationships through various activities.

## SKILLS

**Languages:** Java, C/C++, Python, HTML, CSS, MatLab

**Developer Tools:** Git, VS Code, Github

**CAD Tools:** Solidworks, AutoCad, Fritzing

**Soft Skills:** Problem Solving, Written and Verbal Communication, Attention to Detail, Collaboration