

# Funakoshi Silva

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**WEBSITE:** funakoshisilva.com

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## EDUCATION

### MICHIGAN STATE UNIVERSITY

BACHELOR OF SCIENCE

**Graduated May 2020 | East Lansing, MI**

Major: Computer Engineering

**Relevant courses:** Software Design | Algorithms & Data Struc | Computer Systems | Digital Logic and Microprocessor | VLSI Design

Honors: Dean's List 2016

## TECHNICAL SKILLS

### Proficient with:

Python 3, C/C++, JavaScript (ES6), React, SQL, HTML5, CSS/Sass, Digital Logic, Circuit Analysis, AutoCAD Electrical

## WORK EXPERIENCE

### THE CENTER FOR ANTI-COUNTERFEITING AND PRODUCT PROTECTION

FRONT END ENGINEER

**Fall 2019 - Nov 2019 | East Lansing, MI**

- Designed user-friendly website using HTML, CSS, and JavaScript
- Developed dynamic and interactive website

### FACILITY FOR RARE ISOTOPE BEAMS (FRIB)

ENGINEERING ASSISTANT

**Fall 2018 - Feb 2019 | East Lansing, MI**

- Controls programming support
- Wrote YAML script for alarm configuration
- PLC programming
- Edited engineering schematics in AutoCAD Electrical
- Assigned Mac address and IP address for moxa serial devices and programmable logic controllers, assigned EPICS channel names for alarms
- Wired IFMs, and assembled flow control boxes, cold cathode, ECV, LVDT, cables

## TECHNICAL PROJECTS

### AUTOMATED WINCH FOR UNDERWATER SENSING IN PYTHON

Spring 2020 | East Lansing, MI

- Designed graphical user interface with tkinter library
- Programmed logic of winch to adjust the release of cabled sensor underwater based on desired depth
- Wrote unit test to prevent system from short circuiting

### IMAGE PROCESSING IN C++

Fall 2020 | East Lansing, MI

- Implemented stenography and cryptography to embed a hidden secret message on the image.
- Used 2D vectors and struts/classes to work with PGM files
- Created blur, emboss and sharpening image features by adding multiple operations on the original PGM matrix

### INSTAGRAM LIKER IN JAVASCRIPT

Ago 2020 | East Lansing, MI

- Chrome application that automate instagram likes,
- The application likes photos on the behalf of user account and pick the hashtags to follow

### AQUARIUM DESKTOP APP IN C++

Spring 2020 | East Lansing, MI

- Built C++ application that allows to create an aquarium, visualize and interact with fishes
- Used Microsoft Foundation Classes (MFC)
- Created test cases to prove development concept

## **Human Resources**

Dear Recruiting Manager,

I am a recent graduate computer engineering student from Michigan State University. I have strong interest in software development and web technologies. I am looking for an entry level software engineering position.

I have worked on software design projects in C++, and I am fascinated with algorithms, API's and web technologies. On my free time I enjoy building JavaScript apps and merge them on google chrome.

On my final design project, I worked on developing an automated winch system for underwater exploration. I designed the graphical user interface, using Tkinter toolkit and used Python to write the logic of the winch to adjust the release of cabled sensor underwater based on desired depth. I enjoyed and learn more about developing safe systems by writing unit tests to prevent system short circuit, that could be caused by relays connected to the winch by a micro-controller and portable power source.

I am proficient with C\C++ programming, Python and circuit analysis. I have worked directly with PLC's and other electrical systems for a year at the Facility for Rare Isotope Beams at Michigan State.

I have great familiarity with using Linux terminal commands, computer network, protocols, and troubleshooting Linux/ Unix and Windows systems.

Please do not hesitate to contact me through phone or email for any reason.

Thank you for your time and consideration,

**Funakoshi Silva**

Computer Engineer

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