

# Funakoshi Silva

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**WEBSITE:** funakoshisilva.com

**GITHUB:** github.com/funakoshiapi

**LINKEDIN:** linkedin.com/in/silvafunakoshi

## TECHNICAL SKILLS

### Proficient with:

**Languages:** Python, C/C++, JavaScript (ES6), Dart, SQL, HTML5, CSS/Sass

**Frameworks and Platforms:** React, Flutter, Node.js, Django, Linux, Windows, macOS

**Other:** Digital Logic, Circuit Analysis, AutoCAD Electrical

## WORK EXPERIENCE

### PLANT3R

#### SOFTWARE ENGINEER INTERN

**June 2020 - Present | Remote**

- Development of cross-platform IOS, Android application in flutter
- Rest API flutter programming for virtual assistant connected to Node.js
- Implementation of UI to dart code
- Object-oriented development
- Test-driven development

### 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**

- Wrote YAML script for alarm configuration
- PLC programming, schematics in AutoCAD

## EDUCATION

### MICHIGAN STATE UNIVERSITY

BACHELOR OF SCIENCE

Major: Computer Engineering

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

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

## 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

Aug 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 want to express my deep interest in entering a position as a software engineer for your company. I am a recent graduate with extensive education in software design and application development. I believe I am a strong candidate for a position at your company. I am a fast learner with strong time management and multi-tasking skills. Strong work ethic in a team or individual settings to drive product success and process efficiency. Strong troubleshooting and problem-solving skills with an analytical mindset. Fluent in Portuguese and English with excellent communication and interpersonal skills. My maturity, practical experience, and attention to detail make me confident that I would be a beneficial addition to your team.

I have a strong interest in software development and web technologies. I am currently volunteering as a software engineer and helping to create and integrate virtual assistant API to a cross-platform flutter mobile application for IOS and Android systems.

I have worked on software design projects in C++, and I am fascinated with algorithms, API's, and web technologies. In 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 the 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 PLCs 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 networks, protocols, and troubleshooting Linux/ Unix and Windows systems.

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

Thank you for your time and consideration,

**Funakoshi Silva**

Computer Engineer

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