Elizabeth MyLinh Nguyen

[elizabeth.nguyen@sjsu.edu](mailto:elizabeth.nguyen@sjsu.edu) | (408) 480–4328

EDUCATION

Computer Engineering BS

Est. Completion: May 2018

San José State University

Graduating Senior

**SKILLS**

Software: C/C++, Javascript

Familiar with:

Java, Ruby on Rails, HTML, CSS, Assemblyx86, Verilog, FreeRTOS, PCB development using DipTrace

Unit Testing Frameworks:

Mocha, Chai, NodeJS

Completed Course Work

* + Assembly Language Programming
  + Digital Design I
  + Digital Design II
  + Algorithms and Data Structure Design
  + Advance Algorithm Design
  + Microprocessor Design I
  + Compiler Design
  + Computer Networking I
  + Embedded Electronics
  + Software Engineering I
  + Operating Systems
  + Programming Concepts & Methodology
  + Object Oriented Concept Methodology
  + Introduction to Circuit Analysis
  + Circuit Concepts and Problem Solving
  + Engineering Reports
  + Engineering Statistics

PROJECTS

**NASA’s Astrobee Port Tester**

Summer 2017 – Fall 2017

Developed hardware and software to interface a Raspberry Pi Zero with Astrobee to verify functionality of the expansion port pins. This project will be shipped to space.

* Current & Voltage Limit Testing, Power Draw Reading Circuits
* USB multiplexer, UART, I2C

**Robotics at San José State University: Firmware Engineer**

Fall 2015 – Present

URC 2016: Designed automated cooling system for prototype rover

* NodeJS & embedded linux platform
* Controlled 4 fans and 8 temperature sensors using I2C

URC 2017: Designing a motor controller for drive system

* Working on drive train control system
* All motors and wheels are controlled independently
* Possesses capability to spin in place, strafe, and drive
* Uses a geometric algorithm to control turn radius
* Written in C++ and uses FreeRTOS

**Proof Builder: Hacktech 2016**

Won Best Educational Hack

Created an interactive webpage to help students learn Geometry proofs

Created all libraries for objects and theorems using Javascript, RequireJS, HTML, CSS

**Online Ruby-On-Rails Conversion Assistant**  Fall 2016

Created a RoR tutorial website using RoR, SQL, HTML, CSS

**AES Security Algorithm Implementation w/ C++** Fall 2016

Created an application that encrypt and decrypt a message using AES

WORK & ORGANIZATIONS

**Intern at NASA AMES (Summer 2017 – Fall 2017)**

Worked with the Astrobee Team to develop hardware and software.

**San José State University Robotics** (sjsurobotics.org)

SJSU Robotics is an organization composed of 73 engineers that designs modular rovers for competition. We have competed in the University Rover Challenge (URC).

**Software and Computer Engineering Society (S.C.E)**

Officer: Store Manager for Fall 2016, Associate for Spring 2017

https://sce.engr.sjsu.edu/