

# MICHAEL GRANBERRY

COMPUTER ENGINEER

  michaelgranberryii

[michael.granberry.612@my.csun.edu](mailto:michael.granberry.612@my.csun.edu)

Los Angeles, CA, US Citizen | 520-203-1055

## EDUCATION

**California State University, Northridge – GPA: 3.85**

Major: Computer Engineering; Minor: Computer Science

*Expected Graduation: Fall 2023*

*Northridge, CA*

**Santa Monica College – G PA: 3.22**

Associate of Arts: General Science

*Fall 2016 – Spring 2020*

*Santa Monica, CA*

### Relevant Classes

Microprocessor Systems, Design of Digital Computers, Theory of Digital Systems, CMOS Digital Electronics, Semiconductor Electronics, VHDL, Linear Systems and Signals, Software Engineering, Data Structures with C++ / Java, MATLAB Numerical Analysis

## RELEVANT WORK EXPERIENCE

**ECE Instructional Student Assistant – Theory of Digital Systems, Lab**

*California State University, Northridge ECE Department*

*February 2022 – Present*

*Northridge, CA*

- Designed and built various combinational and sequential digital circuits that met specific design requirements with students.
- Performed schematic design and simulations in PSpice for circuit verification with students.
- Assisted students in debugging their digital logic circuits.
- Developed lab experiments for the professor and prepared lab equipment for upcoming experiment.

**ECE Instructional Student Assistant – Semiconductor Electronics 1, Lab**

*California State University, Northridge ECE Department*

*February 2022 – Present*

*Northridge, CA*

- Designed and built circuits using diodes, BJTs, and MOSFETs that met specific design requirements with students.
- Performed schematic design and simulations in PSpice for circuit verification with students.
- Held weekly office hours and tutorial sessions on designing the fundamental BJT and MOSFET amplifiers.
- Assisted students in debugging their analog circuits.
- Prepared lab equipment for upcoming lab experiments by calculating required circuit component values.

## PROJECTS & LEADERSHIP

**Co-Lead on Drone Modular Smart Pallet Project**

*NASA JPL – California State University, Northridge Autonomy Research Center*

*June 2021 – Present*

*Northridge, CA*

- Developed software in python to acquire range data from an ultrasonic sensor that utilized the I2C bus on a Raspberry Pi.
- Integrated an ultrasonic sensor with ROS (Robot Operating System) by developing publisher and subscriber nodes and launch files.
- Managed a sub-team of 4 members whose responsibilities consisted of sonar, radar, GPS, and IMU ROS integration.
- Created presentations to share and discuss progress, issues, and goals with team.

**Co-Lead Software Engineer**

*PR3 Hotel Management System – California State University, Northridge CS Department*

*August 2022 – December 2022*

*Northridge, CA*

- Developed a hotel management system using C#, WinForms, and Google Firebase Realtime Database.
- Managed a team of 3 members by delegating tasks, reviewing their code, and offering feedback.
- Created UML class diagrams, CRC cards, and a system use case diagram to plan software development.
- Used Agile software engineering methodologies, Jira project management system, GIT, and GitHub to develop software.

**Systems Engineer**

*CSUN Defense – California State University, Northridge ECE Department*

*June 2022 – July 2022*

*Northridge, CA*

- Developed object detection software with Open CV and python to detect faces in an image.

## HONORS & AWARDS

California State University, Northridge Deans List

Associated Students General Scholarship (CSUN)

Honors at Santa Monica College

*Fall 2020, Fall 2021, Spring 2022*

*Fall 2021 – Spring 2022*

*Fall 2016 – Spring 2020*

## SKILLS

### Hardware

Breadboard, Oscilloscope, Function Generator, DMM, Circuit Components Familiarity, Arduino, Raspberry Pi

### Software

ROS, OrCAD Capture PSpice, MATLAB, Linux, LaTeX, GIT/GitHub, OOP (Python, Swift, Java, C++, C#), C, ARMv7