

Miro Markaravanes

1225 N Central Ave, Apt 8, Glendale, CA 91202 • (818) 491-8203 • miromarkarian@gmail.com
www.linkedin.com/in/miro-markaravanes

EDUCATION

University of California, San Diego

Electrical Engineering, BS

GPA: 3.65

La Jolla, CA

2017 – present

Expected Graduation: Jun 2020

- Provost's Honors for 3 quarters.

Glendale Community College

Computer Science

Major GPA: 3.85 (Overall: 3.77)

Glendale, CA

2014 – 2017

- Dean's Honors for 5 semesters.
- Volunteered as the C/C++ SI (Supplemental Instruction) leader, providing supplemental C/C++ instruction to students.
- Served as the robotics lab assistant, providing help to instructors in keeping the lab organized and tidy.

RESEARCH

Pressto Smart Coffee Machine

2015 – 2016

CAPSTONE Program, Glendale Community College

- Member of undergraduate research team that worked on designing and building a smart coffee machine from scratch.
- Designed and tested the electrical schematic diagrams using Altium and LTspice.
- Built and integrated electrical circuits according to the designed diagrams.
- Authored Arduino C code for the smart coffee machine.

De-centralized and provably fair drawing using the Bitcoin Blockchain

2015

- Implemented the first ever de-centralized and provably fair drawing system based on the Bitcoin Blockchain in Python.
Featured on BusinessInsider, AOL Money UK and CryptoCoinNews.

EXPERIENCE

NASA Jet Propulsion Laboratory

Pasadena, CA

Summer Intern, Mars 2020 Lander Vision System (LVS)

Jun 2018 – Aug 2018

- Built the second version of the SpaceCraft Simulator (SCSIM) for the Mars 2020 Lander Vision System, which will be used in field testing the component in 2019.
- Designed hardware for the Nexys 4 DDR FPGA, integrating old RTL and various Pmods.
- Wrote embedded software in C/C++ to interface with the FPGA, integrating flight software modules from Mars 2020.
- Built a GUI and control interface in Python for the LVS camera gimbal.

NASA Jet Propulsion Laboratory

Pasadena, CA

Year-long Intern, Mars 2020 Lander Vision System (LVS)

Jun 2016 – Sep 2017

- Authored an easily maintainable Python software package used for interfacing with the Lander Vision System (LVS) testbeds that was adopted by numerous flight and test software engineers to validate and verify the requirements associated with the project.
- Developed Python modules to interface with different systems included in the Ground Support Equipment (GSE) rack using sockets and serial.

- Developed several major components of ground support equipment software in C++, including a FPGA manager that interfaced with MIL-STD-1553, Serial, and ICC/ITC protocols using a Xilinx Virtex 5 FPGA board and a power supply manager interacting with an SCPI interface.
- Developed data visualization software for the LN-200 IMU.
- Helped probe PCBs and debug issues in electrical components associated with the GSE and the Lander Vision System (LVS) boards.
- Helped install Gentoo Linux and Xenomai realtime kernel patches on different systems.

Sheytoon Inc.

Co-founder and CTO

Los Angeles, CA

2015 – present

- Co-founded startup aimed at making connections in the Persian community across the world.
- Developed the initial iOS and Android applications.
- Grew the user base to 30,000 users (5,000 monthly active).
- Developed plans to sustain profits for over 3 years.

Koupah

Software Engineer

Manhattan, NY (Remote)

Aug 2014 – Jun 2016

- Designed and implemented a complex backend system in PHP and Python to be used by company produced POS systems.
- Built a complete credit card processing gateway used by stores and cafes across Manhattan, successfully processing hundreds of transactions per day.
- Created iOS and Android applications in Java and Objective-C, used by customers for in-store and online ordering from participating stores.

SKILLS

Software: Experienced in C/C++, Python, Swift, Objective-C, Java, PHP, and JavaScript. Working knowledge of Arduino programming. Experience in Wolfram Language and Matlab.

Hardware: Experienced in schematic and PCB design with Altium and Fritzing. Working knowledge of LTspice and PSpice.

3D Modeling: Working knowledge of SolidWorks.

Language: Native speaker of English, Armenian, and Persian.

Other: Private Pilot (ASEL sUAS)

Hobbies: Rock-climbing, cycling, and swimming.

AWARDS

Winner of The Voice Challenge, NBC Universal Hackathon

2014

INVOLVEMENT

President, Alpha Epsilon Omega Fraternity

2018 – present

Social Chair, Alpha Epsilon Omega Fraternity

2017 – 2018

VP of Fundraising, Alpha Gamma Sigma Honors Society

2015 – 2016

Volunteer Organizer, 13th Annual SoCal Linux Expo

2015

Volunteer Referee, St. Francis High School VEX Competitions

2015