#### **Aram Dergevorkian**

Pasadena, California - aram@aramd.net - aramd.net

**Education** University of California, Los Angeles

M.S. Electrical Engineering Anticipated 2025

California State Polytechnic University, Pomona

B.S. Electrical Engineering Dec 2020

President's List / Dean's List 1 Term / 7 Terms

**GPA: 3.6** 

Awards Foundation for Amateur Radio 8 Scholarships, 2016-2019

## **Experience Jet Propulsion Laboratory** (Summer 2016 - Present)

Electronics Engineer - Electronics Technology Group (August 2021 - Present)

Currently developing digital backend electronics for MEM (Microwave Electrojet Magnetogram) instrument. Work involves flight hardware design/testing, support hardware/software development, and systems engineering.

**Electrical Engineer - Columbus Technologies and Services** (January 2021 - August 2021) Developed instrument electronics for PREFIRE (Polar Radiant Energy in the Far-InfraRed Experiment) CubeSat. Work involved PCB design, verilog and software design, ground support hardware/software development, and testing/documentation.

**Intern** (Summer 2016, 2017, 2018, Year-round 2019-2021)

Investigated usefulness of Synopsys Synphony Model Compiler for use in radio science applications. Implemented real-time instrument controller with precision motor control capabilities aimed at CubeSat and SmallSat applications. Refined motor electronics and designed new command and data handling board for use on PREFIRE.

### **UCLA ELFIN CubeSat Project** (Summer 2015 - Spring 2016)

#### **Intern - Communications Subsystem**

Tested the spacecraft's AstroDev He-100 prototype, and He-82 flight radios. Designed and manufactured several PCBs and adapters for the interface and testing of radio equipment. Assisted the earth station team in building and setting up communications equipment.

# **Artistic Entertainment Services** (January 2017 - October 2018) **Electrical Engineer**

Responsible for the production of TwinkleWorks LED fixtures and LED controllers. Developed new series of RGBW LED fixtures and laid the foundation for future RGBW LED controllers.

# **La Cañada Flintridge Tournament of Roses Association** (Summer 2011 - Spring 2019) **Construction Team, Board of Directors**

Responsibilities varied from electronics to hydraulic/mechanical construction. Specific projects include building a data logger for the float's hydrostatic drive system, and complete redesign and assembly of a new hydraulic and pneumatic animation system.

#### **Projects**

Built a variety of radio related electronics, including microphones, bluetooth and android phone radio interfaces, amplifiers, antennas. Built computer independent processor for quadrature DSP to be used with a SoftRock SDR kit as well as a custom modular SDR receiver. Designed and built vehicle accessory control interfaces with CAN bus integration.

Programming Verilog, C (ARM, AVR, PIC), XC (XMOS), Assembly (x86, 68000, 6502, PIC), Python

**Software** Altium, Vivado, iCEcube2, uVision, MPLAB, xTIMEcomposer, MATLAB, VS Code, LabVIEW