

Aram Dergevorkian

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Education

University of California, Los Angeles

June 2024

M.S. Electrical Engineering

Los Angeles, California

California State Polytechnic University, Pomona

December 2020

B.S. Electrical Engineering

Pomona, California

- President's List, Dean's List, K6CPP Amateur Radio Club President

Experience

Amazon Web Services Center for Quantum Computing

December 2024 - Present

Mixed Signal Design Engineer

Pasadena, California

- Designing and building next generation control hardware for Quantum Computing.

Luminavolt LLC

October 2022 - Present

Owner

Pasadena, California

- Design and assembly of custom animatronic control systems, providing on-site support such as PID control system tuning, animatronic show programming, lighting design and programming, PLC programming, and audio mixing.
- Custom embedded systems development for commercial products.

NASA Jet Propulsion Laboratory

Summer 2016 - November 2024

Electronics Engineer

Pasadena, California

- Designed and delivered several FPGA/uC/uP based systems for a variety of space flight instruments.
- Prototyped novel embedded systems architectures, working on hardware, embedded software, and RTL aspects.
- Designed and built power supplies for instruments. Performed MIL-STD-461G EMI/EMC testing.

Columbus Technologies and Services

January 2021 - August 2021

Electronics Engineer

Pasadena, California

- Developed instrument electronics for PREFIRE CubeSat. Work involved PCB design, embedded software and RTL development, ground support hardware/software development, and testing/documentation.

La Cañada Flintridge Tournament of Roses Association

Summer 2011 - Spring 2019

Electronics, Construction Team, Board of Directors

La Cañada Flintridge, California

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

Artistic Entertainment Services

January 2017 - October 2018

Electrical Engineer

Azusa, California

- 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 strobe controllers.

UCLA ELFIN CubeSat Project

Summer 2015 - Spring 2016

Communications Subsystem Intern

Los Angeles, California

- Tested the spacecraft's AstroDev radios, built and tested communications equipment with Earth Station team.

Projects

- Designed and built several custom industrial equipment controllers using CAN bus and lighting industry standard protocols (DMX-512, WS2812B, etc.) for automotive and man-portable applications.
- Designed and built an array of control electronics for the Los Angeles Live Steamers Railroad Museum's signalling system using CAN bus and wireless mesh networking.
- Built a variety of radio related electronics, including amplifiers, antennas, and Bluetooth audio and telemetry interfaces. Built ARM based quadrature DSP processor for SoftRock SDR receiver.

Technical Skills

Languages: Verilog, C (ARM, AVR, PIC), XC (XMO5), Assembly (x86, 68000, 6502, PIC), Python, MATLAB

Software: Altium, KiCAD, HyperLynx, Vivado, iCEcube2, uVision, MPLAB, VS Code, SolidWorks, Siemens LOGO!, PCMACS