



## Technical and Personal Skills

10+ Years	5+ Years	2+ Years	Beginner
Linux Server	C++	Scratch	MIPS Assembly
Bash Scripting	Java	Python	Solidworks
MATLAB	git	LabVIEW	Windows SDK
Spanish	Wolfram Language	L <sup>A</sup> T <sub>E</sub> X	Mandarin Chinese

## Projects

### Yenaldooshi

<https://github.com/ejtejada/Yenaldooshi>

- ◊ Enables full Vulkan and OpenGL acceleration within Ubuntu based virtual machines using P106-100 mining units
- ◊ Modifies X.org files with a Bash script, unlocking gaming and rendering performance within 90% of a GTX 1060

### Society of Automotive Engineers Test Bench

<https://github.com/brevsae/sae-testbench>

- ◊ Employs Arduino controlled fans and kill switches to ensure battery temperatures remained below 60° C
- ◊ Streamlines battery simulations with MATLAB+Solidworks to actualize BMS of LiFePO4 cells in 17s6p array

### Scripts4Hotkeys

<https://github.com/ejtejada/Scripts4HotKeys>

- ◊ Creates a useful toolset of scripts that allow opening sandboxed instances of various gaming platforms via firejail
- ◊ Enables easy keyboard shortcuts in Linux to toggle evdev input devices and to stress test both CPUs and GPUs

## Experience

### Engineer, School of Engineering

August 2021 to Present

*Lennox School District, Moffet Elementary, Lennox, CA*

- ◊ Taught engineering principals via project based labs covering forces, programming, electronics, and 3D printing
- ◊ Collaborated with educators to design and refine the lab materials and metrics to meet NGSS learning standards
- ◊ Documented bill of materials, project goals, and design constraints into clear and visual posters for each lab

### Undergraduate Intern, Material Science Department

June 2017 to August 2017

*Materials Connection REU, University of California Riverside, Riverside, CA*

- ◊ Implemented object tracking of transition metal nanolayers in Wolfram, lowering measurement times by 10%
- ◊ Developed library to interpolate future particle positions using similarity transforms and lagrange polynomial
- ◊ Improved reusability via libraries, documented the lab's Wolfram codebase, and automated offsite backups

### Supplemental Instruction Coach, Mathematics Department

August 2015 to May 2016

*Supplemental Instruction Program, El Camino College, Torrance, CA*

- ◊ Led weekly study sessions for students in College Algebra and Statistics that reinforced learning outcomes
- ◊ Designed robust practice exams based on the professor's notes and hosted timed mock exam sessions
- ◊ Built teaching materials and group exercises that fostered Socratic learning and critical testing strategies

## Education

*University of California Merced, Merced, CA*

May 2020

### Bachelor of Science in Computer Science and Engineering, Minor in Writing

*Selected Coursework: Intro to AI, Numerical Methods, Writing in NatSci, Databases, Operating Systems, Computer Vision*

*El Camino College, Torrance, CA*

December 2017

### Associates of Arts in English, Associates of Science in Physics

*Selected Coursework: Creative Fiction, Public Speaking, Composition, Data Structures, Statistics, Optics + Modern Physics*

## Leadership Roles

### Electrical Systems Officer @ Formula Society of Automotive Engineers, UC Merced

June 2018 to June 2019

- ◊ Implemented and tested electrical control and safety systems for a formula race car's high voltage components
- ◊ Modeled vehicle kinematics and optimized tire camber using MATLAB and Simulink

### President @ Inter-Club Council, El Camino College

August 2016 to May 2017

- ◊ Enforced parliamentary voting procedure for ICC, a student government that oversaw all clubs and charters
- ◊ Planned and followed a budget for all club funds, ensuring ICC transparently allocated its \$30,000 for all clubs

### Treasurer @ Programming Applications Club, El Camino College

August 2015 to May 2016

- ◊ Managed funds for registration fees and transportation to 2 annual hackathons in Southern California
- ◊ Ran weekly training workshops for C++ and algorithms to prepare 9 members for coding and design challenges