



Technical and Personal Skills

| 10+ Years | 5+ Years | 2+ Years | Beginner |
|----------------|------------------|---------------------------------|------------------|
| Linux Server | C++ | SQLite | MIPS Assembly |
| Bash Scripting | Java | Python | Solidworks |
| MATLAB | git | LabVIEW | Windows SDK |
| Spanish | Wolfram Language | L ^A T _E X | Mandarin Chinese |

Projects

Bay Area Rapid Transit Geolocation System

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

- ◇ Collaborated on an RFID tracking system for tracking maintenance workers in tunnels without GPS signal
- ◇ Wrote Python controls for the Raspberry Pi and antenna boards to secure wireless I/O at over 5 foot distances

Society of Automotive Engineers Test Bench

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

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

MacREU 2017 Image Processing

<https://github.com/ejtejada/MacREU2017ImageProcessing>

- ◇ Built Wolfram library for predicting position and analyzing triangular metals in florescent benzene baths
- ◇ Interpolated future positions of metal particles using similarity transforms and lagrange polynomials

Experience

Undergraduate Intern, Crypto Market Researcher

June 2019 to August 2019

Loopring, Shanghai, People's Republic of China

- ◇ Investigated the public actions of competing cryptocurrency exchanges and compiled findings into internal reports
- ◇ Presented biweekly reports to cross-functional teams composed of developers and the marketing team
- ◇ Debugged and documented TRON to ERC-20/Ethereum exchanging smart contracts in the Solidity language

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, lowering measurement times by 10%
- ◇ Developed portable photoluminescent analysis packages to record reactions with adjustable, high-res cameras
- ◇ Improved reusability, documented the lab's Wolfram/LabVIEW 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
- ◇ Designed robust practice exams based on the professor's notes and hosted timed mock exam sessions
- ◇ Created 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