Eliot Khachi

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WORK EXPERIENCE

L3Harris Aerojet Rocketdyne

Canoga Park, CA

Integration & Test Engineer

Feb 2022 - Feb 2024

- Led a cross-functional team to successfully test a propulsion system undergoing Proof Of Design.
- Facilitated weekly meetings with stakeholders to streamline communication and coordinate test-ups to ensure seamless project
 execution and alignment with objectives.
- Developed high-fidelity test planning documentation including FRDs, SOWs, schematics, and test plans.
- Drove the procurement of \$2MM worth of hardware, collaborating closely with designers, manufacturers, and supply chain to oversee fabrication and resolve supply chain delays to meet need dates.

Hydraulics International Inc.

Chatsworth, CA

Engineering Intern

Aug 2021 – Dec 2021

- Assembled, tested, and calibrated over 200 hydraulic pumps and electromagnetic flow meters.
- Increased rate of production by 750% by expanding facilities: organized floor-space, built racks and stocked partsfora stock room, and built mobile carts and workstations.

EDUCATION

California State Polytechnic University, Pomona

Pomona, CA

Bachelor of Science, Aerospace Engineering

Graduation Date: May 2021

PROJECT EXPERIENCE

California Polytechnic State University, Pomona | Student

Aug 2019 - May 2021

- <u>Presented a PDR for the Air Force Stealth Bomber RFP</u> (awarded to the Northrop B-2 Spirit Program): conducted requirements analysis, WBS requirement allocation, architecture definition, trade studies, and risk analysis and mitigation.
- <u>Designed a rocket engine injector</u> using SolidWorks, fabricated a prototype via 3D printing, and conducted a water flow test at 100 psi to verify propellant atomization and flow efficiency.
- Designed a launch vehicle in response to NASA's VCLS Demo 2 RFP to launch small satellites to LEO.
- <u>Programmed a script in Python</u> to automate the design process for a launch vehicle, conducting vehicle sizing, simulation, and stress analysis, and generating multiple successful mission solutions.
- <u>Wired and programmed an Electronic Flight Instrument System (EFIS)</u> with sensors and an Arduino, displaying airspeed, heading, artificial horizon, latitude/longitude, temperature, altitude, and pressure.
- Programmed a spacecraft trajectory from Earth departure to interstellar orbit at 550 AU with MATLAB, leveraging planetary flybys by analyzing NASA Ephemeris data.
- Designed the wing and fuselage of an aircraft and showed positive margins of safety against critical stringer crippling, curved panel buckling, and inter-rivet buckling using Excel.

Hobby Projects | *Programmer*

Jan 2023 - Present

- Configured RS-485 serial communication between my Jandy Aqualink pool & spa and a Raspberry Pi for remote control functionality.
- Developed REST APIs with Java Spring Boot and MySQL, implementing JUnit and Mockito for thorough unit testing and Spring Security and JWT for robust user authentication.
- Developed a game using Javascript to explore 2D physics and gravitational effects.

SKILLS

MBSE, CAD, Microsoft Office, AWS, Linux, MySQL, Docker, Git, Java, Bash, Python, Matlab

CERTIFICATIONS

Secret Clearance | Defense Counterintelligence and Security Agency | February 2026

AWS Certified Cloud Practitioner | Pearson VUE | September 2026