Eliot Khachi

https://www.eliotkhachi.dev | eliotkhachi@gmail.com | 1 (818) 851-1334

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 $2M 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. Canoga Park, CA

Engineering Intern *Feb 2022 - Feb 2024*

- Assembled, tested, and calibrated over 200 hydraulic pumps and electromagnetic flow meters.
- Doubled the capacity of a production line by organizing the floor-space, building racks for a stock room, stocking parts, and building various mobile workstations and carts for assembly and transportation.

EDUCATION

California State Polytechnic University, Pomona Pomona, CA

Bachelor of Science, Aerospace Engineering *Graduation Date: May 2021*

PROJECT EXPERIENCE

Hobby Projects | *Programmer* *Jan 2022 - Present*

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

California Polytechnic State University, Pomona | *Student* *Aug 2019 - May 2021*

- Presented a PDR for the Air Force Stealth Bomber RFP (awarded to the Northrop B-2 Spirit Program): conducted requirements analysis, WBS requirement allocation, architecture definition, trade studies, and risk analysis and mitigation.
- Designed a rocket engine injector 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.
- Programmed a script in Python to automate the design process for a launch vehicle, conducting vehicle sizing, simulation, and stress analysis, and generating multiple successful mission solutions.
- Wired and programmed an Electronic Flight Instrument System (EFIS) 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.

SKILLS

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

CERTIFICATIONS

Secret Clearance | Defense Counterintelligence and Security Agency | February 2026

AWS Certified Cloud Practitioner | Pearson VUE | September 2026