

## Summary

- Full-stack and frontend engineer with 6+ years delivering real-time mission control dashboards, modern design systems, and resilient web services for aerospace operations.
- Blend of product-minded collaboration and technical leadership: ship pixel-perfect UI with Vue/React, craft Node/Redis APIs, and designed 3D models and environments for launch visualizations.

## Education

**California Polytechnic State University**  
Bachelors in Computer Science

San Luis Obispo, CA  
Mar 2019

**California Polytechnic State University**  
Masters in Computer Science

San Luis Obispo, CA  
Dec 2020

## Experience

**Caci, Inc.**  
*Senior Software Engineer (T3)*

Santa Maria, CA  
Oct 2025 - Present

- **Spearheaded modernization initiative** as technical lead for next-generation launch software with Typescript, Vue 3, Vite, Node, Redis, Tailwind, and Shadcn.
- **Led launch support operations** as software lead for 4+ launches annually, managing configuration, deployment, and real-time technical support during critical mission phases; tech stack: Vue 2, JavaScript, Java, Node, Redis, PHP.
- **Mentored team members** in launch procedures and modern development practices, while establishing code documentation and review processes.

**Caci, Inc.**  
*Software Engineer (T2)*

Santa Maria, CA  
Dec 2020 - Oct 2025

- **Architected and implemented** the Launch Feed Display – a real-time Twitter-style interface that consolidates launch data from 15+ Redis sources, providing mission-critical situational awareness during rocket launches.
- **Created full-stack applications** including automated screenshot capture system using Puppeteer, and Electron-based launcher applications for internal tools.
- **Supported 3D visualizations** for rocket launches, using three.js and 3D modeling.
- **Extended predictive diagnostics tooling** by embedding custom React components into a Streamlit microservices UI that turns sensor data into actionable dashboards for faster hardware fault triage; tech stack: Python, Docker, Streamlit, React, TypeScript, Vite.

## Research Experience

**Cal Poly**  
*Game Design Research*

San Luis Obispo, CA  
Sep 2018 - Mar 2019

- **Published research** on multiplayer game engagement dynamics at IEEE Conference on Games 2019.
- **Analyzed social group dynamics** to enhance player engagement and interaction in multiplayer environments.

**Cal Poly**  
*Masters Thesis*

San Luis Obispo, CA  
Mar 2020 - Dec 2020

- **Developed personality-driven AI system** using Big-Five personality traits and emotion models to drive decision-making for NPCs in games.

**Frontend:** Vue 2/3, React, Vite, Webpack, Tailwind, Three.js, WebGL

**Backend & DevOps:** Node.js, Redis, Docker, Puppeteer, Electron

**Tools & Languages:** JavaScript/TypeScript, C#, C++, Python, Maya, Unity Game Engine