

SKILLS

Tools and Languages	Git, Bash, Python, TypeScript, PHP, C#, C
Front-end	Vite, Rollup, React, Redux, Tailwind, Django, WordPress, Flutter
Testing	Storybook, Playwright, Terratest, Mocha
DevOps	Docker, Ansible, Terraform, GitLab CI, GitHub Actions
AWS	CDK/CloudFormation, IAM, S3, EC2, Lambda, CloudFront
Other	Linux, HTTP APIs, GraphQL APIs

SELECTED PROJECTS

Gene/Protein Fertility Research Database January 2022 — June 2025

Software Engineer at SRI International

- Updated a React app to use modern routing features (React Router v7) and build systems (Vite).
- Migrated the code base to TypeScript, including automatic type generation from a GraphQL schema.
- Normalized a PostgreSQL database with an improved index design to enable faster and more flexible queries.
- Collaborated with information security while working towards a NIST 800-53 Rev. 5 Authority to Operate (ATO). System improvements and corresponding documentation updates were driven by code reviews and automated scanning tools (CrowdStrike, Tenable).
- Improved developer tooling to expedite onboarding experiences and productivity.

Marketing Website April 2021 — June 2025

Software Engineer at SRI International

- Developed WordPress plugins for core functionality / third-party integrations and themes for website branding.
- Increased client performance by 138%, as measured by Google Lighthouse.
- Wrote playbooks and developed tooling for code deployment and recovery operations.
- Built tests for redirection, link rot, server stress testing, and more.
- Used the WordPress REST API, parser combinators, and templating via Handlebars.js to migrate heterogeneous CMS content into Gutenberg blocks as part of site content restructuring.

Hardware Trojan Detection Research — DARPA SHEATH October 2019 — March 2021

Software Engineer Intern at SRI International

- Read through documentation for embedded systems and prototyped experiments with potential to support our research ideas.
- Authored and edited bimonthly research reports.
- Modified the Linux device driver and firmware for a BCM5719-based Ethernet card to instrument and simulate a hardware Trojan.

WORK EXPERIENCE

Software Engineer July 2020 — June 2025

SRI International San Luis Obispo, CA

- Managed the software development life cycle (SDLC) for multiple projects simultaneously - driving discussions with stakeholders, designing systems to meet requirements, building and testing, and handling deployments and operations for project websites.
- Planned and supported migrations between managed web hosting platforms and self-managed AWS deployments, using tests to ensure DNS service correctness and HTTP security.
- Provided software prototyping services for cybersecurity research projects.

Software Engineer Intern June 2019 — July 2020

SRI International San Luis Obispo, CA

- Configured software tools and networking for a fleet of Ubuntu hosts which were used in a remote field exercise.
- Developed and maintained a cyber monitoring tool using the proc filesystem on Linux and the Process Status API on Windows.
- Built a prototype 3D-modeling application with React, integrating with REST APIs for Autodesk's cloud platform and internal machine learning research code.

EDUCATION

B.S. Computer Engineering December 2019

California Polytechnic State University San Luis Obispo, CA