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**Location:** Virginia

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## SUMMARY

- Full-stack software engineer with 7+ years of professional experience
- JavaScript/TypeScript/Python applications across Node/Express, FastAPI, React, React Native, and SQL/NoSQL databases.
- Proven track record delivering production systems for federal, defense, and commercial clients, with focus on reliability, test automation, and data-driven decision support.
- Comfortable leading end-to-end feature delivery from requirements through deployment, and collaborating with cross-functional teams in regulated and security-conscious environments.

## CORE SKILLS

- Languages: JavaScript, TypeScript, Python, SQL, Bash
- Backend: Node.js, Express, FastAPI, REST APIs, GraphQL, WebSockets
- Frontend & Mobile: React, React Native, Next.js, Redux, Context API, Tailwind, SCSS
- Databases: MSSQL, PostgreSQL, Oracle, NoSQL, pgVector
- AI & Data: GCP/Gemini, LangChain, HuggingFace, OpenAI & Claude APIs, RAG, NLP, Pandas, GeoPandas, Matplotlib, Seaborn
- DevOps & Tooling: Git, CI/CD (Jenkins, Azure DevOps), Docker, Jira, Confluence, TestRail, Katalon, PyTest, GitHub Actions
- Testing & Quality: Automated UI/system testing, API testing, load/performance testing, ISO 9001/17025, STIG compliance

## PROFESSIONAL EXPERIENCE

### Software Engineer | January 2023 – Present

*Contractor - Federal Highway Administration, Bridge Management Program - Ashburn, VA*

- Design and implement internal data tools and APIs (Python/FastAPI, MSSQL, SQLAlchemy) to streamline bridge inspection and maintenance workflows, reducing manual report creation time.
- Develop AI-assisted workflows (Google Gemini, OpenAI) to query program documentation and historical reports, enhancing engineering QA.
- Build reports and inspect inspection data (Crystal Reports / SQL, Pandas, GeoPandas, Matplotlib/Seaborn, Gradio)
- Lead day-to-day application and server maintenance for mission-critical systems, including monitoring, debugging, and performance tuning of existing databases and websites. ASP.NET, MSSQL services.
- Collaborate and coordinate with other federal agencies, translating regulatory and policy requirements into technical changes with clear documentation.

### JavaScript Developer | November 2021 – January 2023

*Trillion Technology Solutions - Reston, VA (<https://www.ttsiglobal.com/>)*

- Delivered full-stack features for military and government web and mobile applications using React, React Native, Node/Express, and GraphQL, supporting internal operations and field personnel workflows.
- Implemented responsive React/React Native interfaces for Web, Windows, iOS, and Android, improving usability and consistency across platforms while adhering to strict design and accessibility requirements.

- Built and consumed REST and GraphQL APIs to integrate authentication, role-based authorization, and domain-specific workflows, reducing manual data entry and improving data integrity across systems.
- Used Redux and Context API to manage complex client-side state, simplifying data flows and decreasing UI bugs related to synchronization and caching.
- Collaborated with QA and DevOps teams to configure automated regression suites (Jira + Katalon, custom scripts), increasing confidence in releases and shortening feedback loops on critical defects.
- Produced technical documentation, STIG-aligned configuration notes, and test evidence required for security and compliance reviews, helping products move through accreditation with fewer rework cycles.
- Stack: JavaScript, TypeScript, React, React Native, Node.js, Express, GraphQL, Redux, Context API, Tailwind, SCSS, Jira, Katalon

### **Senior Systems Test Engineer | November 2013 – September 2021**

*Teledyne LeCroy - Charlottesville, VA & Farmington Hills, MI (<https://www.teledynelecroy.com/>)*

- Served as ISO 9001 (Quality) and ISO 17025 (Test) lead auditor, designing test processes and documentation that aligned engineering practices with formal quality standards.
- Planned and executed functional, system, integration, and user acceptance testing for complex hardware/software products, covering wireless and wired protocols (802.11 WiFi, 802.15.4, Bluetooth, NFC, USB Gen3/4).
- Developed automated UI and system tests using Python (PyTest, PyWinAuto), Selenium, and TestRail, reducing manual regression effort and improving test coverage across multiple releases.
- Performed root cause analysis of customer-reported issues, working closely with firmware, hardware, and software teams to isolate defects and provide clear, reproducible defect reports.
- Created and maintained batch/shell scripts for test setup, environment management, and data collection across Windows and Linux environments.
- RF test environments (Faraday shielding, controlled SNR setups, environment simulation) to reproduce field conditions and validate product behavior under realistic interference and load.

### **EDUCATION**

- General Associate of Science – Germanna Community College (2011 – 2013)

### **CERTIFICATIONS**

- CIW – Advanced HTML5 and CSS3 Specialist, User Interface Designer, Website Design (2019)
- CompTIA – Project+, A+ (2018)
- Cisco – CCENT (2013)

### **PERSONAL PROJECTS**

- Participated in AI-focused hackathons (LabLab AI, Google Vertex, HackGPT), building prototypes that combined LLMs, vector search, and custom APIs for knowledge retrieval and workflow automation.
- Regularly explore emerging tooling in the JavaScript/TypeScript and Python ecosystems (e.g., modern React patterns, FastAPI, LangChain, vector databases, AWS, GCP, Docker) to improve delivery speed, developer experience, and system reliability.
- See website for more: <https://advanced.promo>