
Derek Colnar

Senior Software Engineer (Automation, QA & Data Systems)

San Antonio, TX

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SUMMARY

Senior Software Engineer with 10+ years of experience in automation, quality engineering, and data systems across e-commerce and SaaS platforms. Proven ability to solve complex technical and operational challenges by building scalable automation frameworks, improving data integrity, and driving system reliability. Strong in cross-functional collaboration, technical documentation, and designing processes that scale with growing systems.

RELEVANT EXPERIENCE

Senior QA Engineer - 1000Bulbs

August 2024 - Present

- Led development of a front-end automation framework using Playwright, increasing test coverage and reducing manual QA effort; integrated into CI/CD via GitHub Actions for scheduled execution.
- Built and maintained integration tests supporting migration to Oracle NetSuite ERP/CRM, ensuring data consistency and functional parity across systems.
- Developed internal tooling for data integrity validation and order workflow monitoring, reducing production issues through early anomaly detection.
- Designed and implemented a manual test suite, establishing structured regression coverage and QA baselines.
- Authored technical and business process documentation to improve cross-team alignment and accelerate onboarding.
- Implemented Google Tag Manager and Osano consent management, enabling compliant script loading and proper Google Advanced Consent Mode signal handling.
- Created automated tests for consent-based script validation and built a crawler to audit LD+JSON structured data for SEO compliance.
- Leveraged AI coding agents (Claude CLI, OpenAI Codex, ChatGPT) to accelerate development, generate test cases, and streamline documentation workflows.

Data Cleaning and Analysis - Contractor (Multiple Contracts)

March 2024 - August 2024

Data Services Consultant (Contract)

- Cleaned, transformed, and validated datasets using Python (Pandas), JavaScript, and SQL.
- Analyzed sales and logistics data to identify inefficiencies and revenue opportunities, supporting data-driven decision-making.

E-commerce Data & Automation (Contract)

- Built scraping and parsing pipelines to extract and structure product data from vendor sources for Shopify, Amazon, and Etsy integrations.
- Automated extraction of product data and images from PDFs using PyPDF2 and pdfplumber, converting unstructured data into import-ready formats.
- Improved listing accuracy and reduced time-to-market through standardized data transformation workflows.

Healthcare Data Migration (Contract)

- Supported EHR/EMR migrations in collaboration with DBAs and vendors, ensuring accurate and secure data transfer.
- Validated migrated data for integrity and system functionality to minimize disruption to clinical workflows.
- Maintained HIPAA compliance by working exclusively with anonymized datasets.

Senior Quality Assurance Engineer, Auctane LLC (Formerly ShippingEasy)

January 2018 - February 2024

- Established the QA team and operations from the ground up, including hiring criteria, onboarding processes, and training documentation.
- Defined and implemented QA strategies in collaboration with leadership, aligning testing practices with product and business goals.
- Introduced modern automation frameworks (Jest, Playwright) for integration and end-to-end testing, improving reliability and coverage.
- Developed and maintained API test suites and internal tooling, including data generators for QA teams.
- Implemented data validation workflows using web scraping techniques, improving platform data integrity.

Quality Assurance Lead, Malauzai Software Inc., LLC

January 2015 - January 2018

- Led a QA team of 6 (5 manual, 1 automation), ensuring quality across all releases.
- Implemented structured test case management, release documentation, and QA processes to improve efficiency and coverage.
- Partnered with Product to align QA strategy with business requirements and user expectations.
- Stepped in to manage feature development and delivery during gaps in project management.

Web Development Contractor, Malauzai Software Inc., LLC

July 2014 - December 2014

- Partnered with designers to convert PSDs into HTML and SCSS, ensuring accurate representation of design elements and responsive layouts.
- Supported transition from jQuery to React (beta)

Tech Lead, VGC Unlimited LLC

January 2011 - July 2014

- Orchestrated the establishment of an outsourced development business model, cultivating a robust network of vendor partners.
- Led the direct creation and management of the vendor network, ensuring seamless collaboration and high-quality deliverables.
- Successfully delivered over 40 high-quality websites, mobile apps, and web apps, meeting client specifications and deadlines.
- Overhauled business documentation and processes across the organization, enhancing efficiency and clarity.
- Oversaw the management of all designers and developers, fostering a collaborative and productive work environment.
- Demonstrated flexibility by engaging in ad-hoc coding tasks when the vendor network was unavailable, ensuring project continuity and delivery.
- Through these initiatives, contributed to the successful execution of projects, optimized operational workflows, and maintained high standards of quality and efficiency within the organization.

TECHNICAL SKILLS

Automation & Testing:

- Playwright, Selenium, Jest, Puppeteer, TestRail, QTest, Capybara

Languages:

- Python, JavaScript, Java, PHP, Ruby

Data & Scripting:

- Pandas, BeautifulSoup, SQL, Data Scraping & Transformation

Dev & CI/CD Tools:

- Git, GitHub Actions, Jenkins, TeamCity, Postman, VSCode, PyCharm

Web Technologies:

- HTML/CSS, React, Angular, Node.js, SEO

AI-Assisted Development:

- OpenAI Codex, Claude CLI, AI-assisted testing & code generation, AI Search Optimization (AEO/GEO)

Tools & Platforms:

- JIRA, Trello, Google Workspace, PowerBI, Google Tag Manager, Osano

Core Competencies:

- Test Automation, Data Integrity, QA Strategy, Process Design, Technical Documentation