

STRENGTHS

- Framework Architecture**
Built shared browser and API foundations for scientific products; teams gained a clearer path from coverage gaps to maintainable tests.
- Scientific Domain Testing**
Tested sample chains, measurements, units, and visualizations; domain specialists trusted results during difficult release discussions.
- Pipeline Reliability**
Improved Jenkins feedback with parallel stages, artifacts, and monitoring; nightly failures became easier for teams to investigate.
- AI-Assisted Engineering**
Used Copilot, Windsurf, and Claude for drafts and edge cases, then applied review discipline before any merge.
- Team Coaching**
Coached junior engineers through locator, timing, and flaky-test issues; peers often sought practical advice on stubborn failures.

SKILLS

Playwright

Selenium WebDriver

Java

Python

TypeScript

TestNG

PyTest

Karate Framework

Cucumber BDD

Jenkins Pipelines

Gitflow

Allure Framework

AWS Services

API Testing

LIMS Testing

LANGUAGES

English

Native

SUMMARY

Senior **QA Automation Engineer** with 7+ years delivering UI, API, and **BDD** quality engineering for **scientific** software and laboratory data workflows. Builds scalable automation frameworks with Java, Python, TypeScript, Playwright, **Selenium WebDriver**, TestNG, PyTest, Karate, Cucumber, Jenkins, AWS, and Allure. Recent work supports LIMS platforms, chemical sample intake, chain-of-custody controls, result approval, units of measure, integrations, and scientific dashboards. Leads Gitflow practices, pipeline reliability work, dynamic locator diagnosis, network-state testing, and evidence-based defect analysis across distributed squads. Uses GitHub Copilot, Windsurf, and Claude for test design, refactoring, edge-case analysis, and junior engineer coaching. Ready to help a scientific software team shorten feedback cycles, strengthen release confidence, and deliver dependable automation across UI, API, and BDD layers.

EXPERIENCE

Senior QA Automation Engineer

HelixPoint Laboratory Technologies April 2025 - Present Raleigh, North Carolina

Owns automation strategy for a cloud LIMS platform supporting chemical sample intake, chain-of-custody controls, result approval, and scientific dashboards. Guides framework modernization, API coverage, pipeline operations, AI-assisted quality practices, and technical coaching across product squads.

- Rebuilt **Playwright TypeScript** coverage with asynchronous fixtures and resilient locators for laboratory release workflows.
- Added Allure attachments and traces, giving release teams clearer evidence during complex sample approval investigations.
- Extended **Java** Selenium WebDriver and **TestNG** suites during gradual migration toward modern Playwright browser coverage.
- Designed Karate API suites validating sample services, unit conversions, authentication paths, and downstream integration behavior.
- Maintained **Jenkins** pipelines on AWS EC2 with S3 artifacts and CloudWatch regression monitoring.
- Applied **Gitflow** reviews with Copilot, Windsurf, and Claude for safer test scaffolding and edge-case analysis.

QA Automation Engineer

Apex Meridian Analytics January 2023 - March 2025 Durham, North Carolina

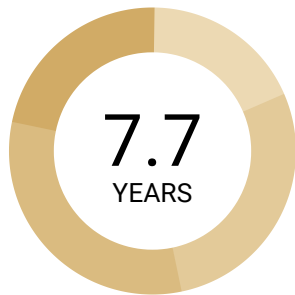
Delivered quality engineering for scientific visualization and **laboratory** reporting products used by analytical chemistry and materials research groups. Built shared Python automation, expanded browser and API coverage, translated domain requirements into BDD scenarios, and coached junior engineers.

- Created shared **Python PyTest** framework with asynchronous utilities, fixtures, and service clients for testing.
- Added Playwright coverage for trend charts, filters, exports, and role-based access workflows.
- Paired failures with screenshots, traces, and Allure metadata for faster release triage conversations.
- Translated measurement and exception requirements into Cucumber features with reusable step definitions.
- Built **Jenkinsfile** stages for parallel execution, environment provisioning, result publishing, and rerun analysis.
- Coached three junior engineers on **dynamic locators**, flaky-test diagnosis, Claude, and **GitHub Copilot**.

QA Automation Engineer

Cobalt Ridge Software July 2020 - December 2022 Charlotte, North Carolina

MY CAREER



● Senior QA Automation Engineer at HelixPoint Laboratory Technologies (1.4 Years)

● QA Automation Engineer at Apex Meridian Analytics (2.2 Years)

● QA Automation Engineer at Cobalt Ridge Software (2.4 Years)

● Junior QA Automation Engineer at Blue Oak Digital Labs (1.7 Years)

Expanded quality engineering for a LIMS product connecting instrument data, sample records, and customer result portals. Maintained browser suites, added **REST** integration coverage, improved reporting evidence, and partnered with domain specialists on **chemical** workflow validation.

- Replaced brittle Selenium selectors and synchronized browser actions with asynchronous service responses.
- Added Karate coverage for registration, result status, permissions, and units-of-measure validation.
- Configured Allure dashboards with attachments, environment details, historical trends, and failure categories.
- Managed **Git** feature branches, pull requests, webhooks, and controlled integrations across four product modules.
- Converted chemical workflow specifications into boundary, negative, and data-integrity tests for Jenkins execution.
- Improved release readiness discussions through clearer failure evidence and domain-focused regression coverage.

Junior QA Automation Engineer

Blue Oak Digital Labs 📅 October 2018 - June 2020 📍 Greensboro, North Carolina

Supported supervised automation for web applications capturing laboratory observations, managing chemical samples, and reviewing instrument-derived records. Built foundational Java, Python, BDD, Jenkins, Git, AWS, and scientific data testing experience alongside senior quality engineers.

- Developed **Java** utilities, Selenium page objects, and TestNG cases for sample workflows.
- Added **Python** PyTest checks for service responses and database-facing laboratory data validations.
- Converted manual acceptance scenarios into **Cucumber** features and reusable step definitions.
- Created Jenkins jobs for scheduled browser suites with archived logs and screenshots.
- Used structured defect evidence to separate application defects from environment and timing failures.
- Practiced Git **branching** and pull requests while learning **AWS** test environments and scientific presentations.

PROJECTS

Cloud LIMS Regression Modernization 📅 2025

Improved release confidence through asynchronous Playwright coverage, Karate service checks, Allure evidence, and AWS-backed Jenkins regression operations for laboratory workflows.

Scientific Visualization Quality Framework 📅 2024

Created a Python and PyTest framework for charts, exports, measurement data, role paths, and API validation across scientific reporting workflows.

Chemical Workflow BDD Library 📅 2022

Turned laboratory specifications into readable Cucumber scenarios covering sample registration, approvals, exceptions, permissions, and units-of-measure integrity.

LEADERSHIP & AWARDS

- Recognized by engineering leadership for modernizing laboratory automation coverage and improving release evidence quality.
- Selected as a peer mentor for junior engineers learning dynamic locator diagnosis and AI-assisted QA workflows.
- Received team recognition for dependable Jenkins regression support across scientific product releases.

EDUCATION

Bachelor's Degree in Computer Science

University of North Carolina at Greensboro 🎓 GPA: 3.5 📅 2018 📍 Greensboro, North Carolina

Coursework: *Object-Oriented Programming, Data Structures, Software Engineering, Database Systems, Testing Methodologies*

CERTIFICATIONS

- AWS Certified Cloud Practitioner 📅 2022
- Certified Tester Foundation Level (CTFL) 📅 2020

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, TypeScript, JavaScript
- **UI Automation:** Playwright, Selenium WebDriver, asynchronous testing
- **Python Testing:** PyTest, Unittest, Python fixtures
- **Java Testing:** TestNG, Java collections, object-oriented programming
- **BDD Frameworks:** Cucumber, Gherkin, Behave
- **API Testing:** Karate Framework, REST, API integration testing
- **CI/CD Platforms:** Jenkins, Jenkinsfile, declarative pipelines
- **Version Control:** Git, Gitflow, feature branching
- **Test Reporting:** Allure Framework, custom dashboards, historical trends
- **AWS Services:** EC2, S3, RDS, Lambda, CloudWatch
- **GenAI Tools:** GitHub Copilot, Windsurf, Claude
- **Scientific Systems:** LIMS, chemical data workflows, scientific visualizations

PROFESSIONAL AFFILIATIONS

- Member, Association for Software Testing, with focus on practical quality engineering methods.
- Participant, Raleigh technology community, sharing automation patterns and scientific software testing lessons.

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST