

Position Summary

Avum is seeking a Software Development Engineer in Test (SDET) to develop, maintain, and execute automated testing solutions supporting Department of Defense programs. This hands-on role combines software development and quality assurance to improve test coverage, identify defects, and support reliable software releases.

The ideal candidate has experience with object-oriented programming, the Page Object Model, data-driven testing, and integrating automated tests into CI/CD pipelines. The SDET will work closely with developers, analysts, and QA team members to maintain automation frameworks, troubleshoot test failures, and ensure applications meet functional, performance, and quality requirements.

Key Responsibilities

- Develop, enhance, and maintain reusable automated test frameworks and test suites for complex federal applications.
- Create data-driven automated tests using external data sources such as JSON, CSV, Excel, or databases.
- Use the Page Object Model and object-oriented programming principles to separate test logic from user interface elements, reduce code duplication, and improve maintainability.
- Develop and maintain automated functional, regression, smoke, integration, performance, and load tests.
- Support the integration and execution of automated tests within CI/CD and DevSecOps pipelines.
- Monitor automated test results, investigate failures, identify root causes, and work with developers to resolve defects.
- Update automated tests as application features, user interfaces, and business requirements change.
- Analyze application workflows and business rules to identify reusable testing patterns and opportunities to increase automation coverage.
- Participate in peer code reviews and follow established coding and automation standards.
- Collaborate with developers, analysts, and manual QA team members to identify testing needs and close coverage gaps.
- Stay current on testing tools, libraries, and automation practices and provide recommendations when appropriate.

- Maintain test plans, automation documentation, execution results, defect records, and testing metrics in support of contract and compliance requirements.
- Participate in Agile ceremonies, release planning, and other team activities

Compensation

The salary range for this position is \$100,000-\$120,000 annually. Actual compensation will be determined based on experience, qualifications, certifications, and geographic location. Avum offers a comprehensive benefits package including medical (Cigna), dental and vision (Principal), 401(k), PTO, education reimbursement, and certification reimbursement.

Work Environment & Requirements

- U.S. citizenship required
- Security clearance: Active Secret clearance required or ability to obtain
- Background check required

Equal Employment Opportunity

Avum, Inc. is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, veteran status, or any other protected class under federal, state, or local law. Avum is committed to compli

Required Qualifications

- Bachelor's degree in Computer Science, Engineering, Information Technology, or a related technical field. Equivalent education, training, or professional experience may be considered.
- At least three years of experience in automated software testing, test automation engineering, or an SDET role.
- Proficiency in at least one object-oriented programming language, such as Java, Python, C#, TypeScript, or JavaScript.
- Hands-on experience developing or maintaining automated testing frameworks.
- Experience using the Page Object Model or a comparable automation design pattern.
- Experience developing data-driven automated tests using external test data sources.
- Experience integrating or executing automated tests within CI/CD pipelines.
- Proficiency with Git workflows, including branching, merging, pull requests, or code reviews.

- Experience with Agile or Scrum development environments and modern software quality assurance practices.
- Strong troubleshooting, analytical, and problem-solving skills.
- Ability to clearly document testing processes, defects, results, and technical findings.
- U.S. citizenship is required.
- Ability to obtain and maintain a government security clearance.

Preferred Qualifications

- Experience testing Appian applications or an Appian Certified Developer credential.
- Experience with performance and load-testing tools such as Apache JMeter, LoadRunner, or Locust.
- Experience testing applications hosted within secure cloud environments, preferably AWS.
- Experience supporting Department of Defense or other federal government programs.
- Familiarity with government procurement systems, federal acquisition processes, FAR, or DFARS requirements.
- Relevant certifications such as ISTQB Certified Tester, Certified Associate in Software Testing, AWS Certified Developer, or DAWIA Test and Evaluation certification.
- Experience with Playwright, FitNesse for Appian, Appian Locust, or other automated testing tools.