



LONE STAR TECH

Job Posting

Full Stack Software Engineer

With SDET Capabilities

Expires: 04/20/2026

Full-Stack Software Engineer with SDET Capabilities (AI-Enhanced Development)

Lone Star Tech is looking for a **Full-Stack Software Engineer with SDET Capabilities**. The selected candidate will support a large customer engagement focusing on mobile apps.

Role Overview

You will be responsible for building and maintaining computer systems, software, and custom applications used by both internal and external users, with a focus on delivering custom content solutions across a wide variety of functional use cases. You will collaborate with cross-functional business and engineering teams to solve complex problems and implement scalable solutions across **Angular Web, Flutter Mobile, and .NET API ecosystems**.

This role uniquely blends **full-stack software engineering** with **Software Development Engineer in Test (SDET)** responsibilities. You will design and build production-quality software *and* own the automation frameworks, testing strategies, and quality engineering practices that ensure high-quality delivery. You will champion **shift-left testing**, reduce defect leakage, and improve delivery efficiency through both engineering excellence and test automation.

This role requires demonstrated proficiency leveraging **AI code assistants** (preferably Windsurf or alternatives such as Cursor, GitHub Copilot, Claude, etc.) to rapidly develop, test, and iterate on software solutions. The ideal candidate brings strong programming expertise, excellent analytical and problem-solving abilities, and a passion for building reliable, maintainable, and well-tested systems.

Responsibilities

Software Engineering

- Design and develop software solutions based on customer requirements both independently and as part of a collaborative engineering team.
- Leverage **AI code assistants** to accelerate development cycles, generate test cases, refactor code, and evaluate technical solutions.
- Build **distributed and scalable systems** capable of supporting high-volume transactional workloads in **24/7 environments**.
- Develop and maintain **modern front-end applications using Angular**.
- Contribute to **cross-platform mobile application development using Flutter** where applicable.
- Write clean, maintainable, and well-tested code with testing at multiple levels (unit, functional, integration).
- Participate in customer engagements including **solution design, storyboarding, and implementation discussions**.
- Apply **Agile, Lean, and Scrum methodologies** within daily development workflows.
- Work across multiple application types including **web, mobile, and desktop solutions**.
- Approach customer engagements with a **consultative mindset**, helping clients understand technical tradeoffs and opportunities.

Automation Framework Development

- **Web (Angular):** Build and maintain UI automation using **Playwright** (preferred) or Cypress, covering DOM interactions, state changes, API calls, routing, rendering validations, and accessibility/visual/performance checks.
- **Mobile (Flutter):** Automate Flutter apps using **Appium, Flutter integration_test, BrowserStack/Firebase**, covering navigation, widget validations, gestures, offline behavior, and device-specific flows.
- **Backend (.NET API):** Develop API automation using **Postman/Newman, RestAssured, or C# frameworks**; validate REST endpoints, business logic, data mapping, contracts, and error scenarios; implement **contract testing (PACT)** for microservices compatibility.

Quality Engineering & Shift-Left Practices

- Partner with developers early to define testability requirements and embed quality at every stage of the SDLC.
- Participate in PR reviews for automation readiness and code quality.
- Write and maintain test plans, scenarios, and acceptance-criteria-based validations.
- Build regression suites for each release or nightly pipeline.
- Validate end-to-end flows across Web → APIs → Mobile.
- Identify quality gaps in error handling, logging, observability, and performance.
- Provide clear **Root Cause Analysis (RCA)**, reproducible scenarios, detailed logs, and cross-platform debugging insights.

CI/CD & DevOps Alignment

- Integrate automated tests into **GitHub Actions, Jenkins, or Azure DevOps** pipelines.
- Configure parallel execution, test environments, and dependency installations.
- Generate reports and communicate quality trends proactively to engineering and product teams.

Environment, Data & Device Management

- Maintain test users, test data, mocks, and device configurations.
- Coordinate across staging, demo, UAT, and production-like environments.

Required Qualifications

- **5+ years of professional full-stack software development experience**, with meaningful exposure to testing and quality engineering.
- Proven experience using **AI code assistants** (Windsurf, Cursor, GitHub Copilot, Claude, etc.) in software development workflows.
- Experience developing **modern front-end applications with Angular** (TypeScript, DOM, XHR, browser dev tools).
- Experience building or contributing to **mobile applications using Flutter/Dart** (widgets, state management, layouts).
- Hands-on experience with **UI automation frameworks** such as Playwright, Cypress, or Selenium.

- Experience with **API automation** using Postman/Newman, RestAssured, or C#-based frameworks; working knowledge of HTTP, REST API design, auth, and JSON.
- Experience integrating automated tests into **CI/CD pipelines** (GitHub Actions, Jenkins, or Azure DevOps).
- Database integration experience (Entity Framework, MSSQL, PostgreSQL, MongoDB, etc.).
- Knowledge of **microservices architecture** and service contract/compatibility testing concepts.
- Demonstrated ability to **rapidly prototype, develop, and test solutions** using AI-assisted development workflows.
- Strong engineering fundamentals with a focus on **code quality, scalability, and maintainability**.
- Experience implementing **performance, scalability, and security** best practices.
- Strong written and verbal communication skills with the ability to translate complex technical concepts clearly.
- Ability to travel occasionally (**<10%**) for project support, client collaboration, or onboarding activities.

Preferred Qualifications

- Strong experience developing **Angular-based front-end applications**.
- Experience developing **mobile applications using Flutter and Dart**, including mobile test automation (Appium, Flutter integration_test, BrowserStack/Firebase).
- Experience with **C# and .NET frameworks**, including backend API development and automation.
- Experience with **contract testing frameworks (PACT)** for microservices validation.
- Proficiency using **Windsurf IDE** for AI-assisted development.
- Familiarity with multiple **AI code assistant platforms** and their strengths.
- Experience mentoring engineers on **AI-enhanced development workflows** or quality engineering practices.
- Contributions to **open-source projects, technical blogs, or engineering communities**.

Expected Outcomes

- **80–90% automation coverage** across Web, Mobile, and API layers.
- Reduced manual regression dependency and faster defect detection.
- Stable, reliable automation pipelines integrated into every release cycle.
- Improved delivery velocity through shift-left quality practices and AI-assisted development.
- Strong alignment and collaboration with engineering, QA, and product teams.

What Sets You Apart

- You embrace **AI as a productivity multiplier** while maintaining high engineering standards.
- You understand **when AI assistance is valuable and when human expertise is critical**.

- You actively explore and experiment with **emerging AI development tools**.
- You can clearly communicate **AI development benefits and limitations** to both technical and non-technical audiences.
- You treat **AI tools as collaborative engineering partners**, not replacements for engineering judgment.
- You think about **quality as a first-class engineering concern** — not an afterthought — and naturally embed testing into everything you build