Liu Xu (Daisy)

Senior Test Engineer / SDET | 7+ Years of Experience

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Key Strengths

- 8+ years of testing and quality assurance experience, with core competencies in **test system automation, test process design, and laboratory testing workflow management**
- Led **test management system and laboratory process digitalization** at QIMA, a leading third-party testing and certification body, with deep involvement in material testing workflows: sample intake → test scheduling → lab execution → report generation → data delivery
- Independently developed **QA Test Agent** (LLM-powered intelligent agent): automatically parses test requirements → one-click generation of complete Xray-format test cases, enabling AI-assisted test design
- Pioneered **k6** cloud-native performance testing platform: curl-to-script automation with ramping-vus executor and production-grade thresholds (p95 $<$ 2s, failure rate $<$ 1%), completing multi-scenario high-load stress tests and capacity planning
- Test automation coverage: LT module from **0% to 94%** (core flows 100%); myQIMA platform core modules **100%** covered (sample management, test scheduling, report output, supplier management, test calculator); regression cycle reduced from 3 days to **4 hours** (**800%+** efficiency gain)
- Led deep integration of test management platform with **Jira Xray**, achieving full-chain traceability from test plan → case execution → result feedback
- Self-developed AI API gateway (**Go-based QIMAGPT Proxy**) and **DevOps tool platform** (Python/Streamlit, 8.5K LOC, 87% coverage) – full-stack test system development capability
- Deployed local **Ollama + DeepSeek** LLMs, authored knowledge base documents, continuously exploring frontier AI applications in testing

Technical Skills

- **Test Tools & Platforms:** Python (advanced – automation frameworks, test scripts, data processing), JavaScript (Cypress/ES6+), TypeScript (Playwright E2E), Go (test system backend); Cypress 12+, Selenium 4.x, Playwright, Appium, HttpRunner
- **Performance & Stress Testing:** k6 (ramping-vus executor, threshold management), JMeter, load testing, concurrent stress testing, capacity planning
- **Test Management & Traceability:** Jira + Xray (deep integration, bidirectional sync, auto result upload), TestRail, Zephyr; test case design, test plan management, defect tracking closed-loop
- **CI/CD & Automation Pipelines:** CircleCI, Jenkins (pipeline orchestration, parameterization), GitHub Actions, Docker (containerized test environments)
- **Test Architecture & Principles:** Page Object Model (POM), data-driven testing, high reusability (60%+), Shift-Left testing, layered architecture design
- **AI & Intelligent Testing:** QA Test Agent (LLM-driven intelligent agent), Prompt Engineering, local Ollama + DeepSeek LLM deployment, AI-assisted test design

- **Programming Languages:** Python (advanced), JavaScript/TypeScript, Go (microservices), Shell/PowerShell (script automation)
- **Databases:** SQL (PostgreSQL/MySQL – querying, validation, data setup/teardown)
- **Development Tools:** Cursor (primary), Claude Code, GitHub Copilot, Git (advanced workflows, PR, branching), Docker
- **Languages:** English (proficient listening, speaking, reading, writing – 5 years foreign enterprise experience); Mandarin (native)

Professional Experience

QIMA (Testing & Certification) | Test Engineer / Test System Developer | 2024.08 – Present | Shenzhen

QIMA is a leading global third-party testing and certification body providing material testing, compliance certification, and supply chain quality management services. Key testing and quality assurance responsibilities:

- Owned full lifecycle testing and automation of the **Laboratory Testing Management System (Lab Testing Module)**, covering sample intake, test scheduling, lab execution status tracking, test report generation and delivery; core business flow automation coverage from 0% to **94%**
- Built automated test suite for myQIMA platform core modules achieving **100%** coverage, spanning sample management, test scheduling, report output, supplier management, and test calculator (Booking, Payment, Reports, LT Program, Supplier, Calculator)
- Drove resolution of **139** High/Blocker defects across payment processing, sample booking, laboratory testing workflows, report filtering and sorting, supplier permission control, Shein special client testing, and test item editing
- Led deep integration of test management platform with **Jira Xray**: automatic test result sync-back, full traceability from test plan → case → execution result, using reuse strategy + bidirectional binding
- Implemented **k6** performance testing platform: developed production-grade load test scripts (ramping-vus executor + thresholds p95 $<$ 2s, failure rate $<$ 1%), completing high-concurrency stress tests across order submission / payment processing / report query scenarios with capacity planning
- Developed **test pipeline automation system**: CircleCI mainline service pipelines + EC2/Jenkins legacy service deployments, with API toolkit for one-click build triggers, auto-approval, and deployment status management
- Independently developed **QA Test Agent** (LLM-driven intelligent agent): auto-parse test requirement documents → one-click generation of complete Xray-format test cases, improving test design efficiency
- Self-developed **DevOps Tool Platform** (Python/Streamlit, 8.5K LOC, 87% coverage): integrated Jira issue management, test data querying, pipeline status monitoring, and 7 other functional modules
- Participated in defining **testing standards and quality benchmarks** (8 major documents: test case design guidelines, API testing guide, data management, security practices, code quality standards, etc.)
- Maintained **20+ knowledge base documents** (test technology guides, tool manuals, AI LLM deployment, blockchain whitepaper, etc.), continuously sharing QA best practices
- Ranked **#1** contributor across 37 team members on GitHub, consistently leading commit activity

KPMG | Senior Test Engineer / Team Leader | 2021.09 – 2024.05 | Shenzhen

- Responsible for **Volvo Enjoy Driving Finance Leasing Platform** (financial services system), led 10-person testing team to deliver on time with high quality
- Built full automation framework from 0 to 1 using **Python + Selenium 4.x + pytest + HttpRunner + Docker**, with layered architecture design (Test Cases → Page Objects → Core Framework → Utilities)
- Implemented **Appium** full-platform automation: covering iOS/Android native/hybrid/Web applications
- Business flow coverage: user authentication, pre-audit (qualification/risk assessment), order submission, e-signing, fund disbursement, credit approval, subscription (individual/enterprise)
- Established Jenkins CI/CD pipeline, shortened release cycle by **50%**
- Achieved **60%+** test code reusability through POM pattern + data-driven testing design

Qian Da Ma (Everyday Fresh) | Senior Test Engineer | 2021.06 – 2021.09 | Shenzhen

- Led automation testing framework development for fresh supply chain management system
- Responsible for full-chain automated test case design and execution for order, inventory, and supply chain modules
- Responsibilities: writing/executing test cases per plan, Charles packet capture API testing, defect logging & tracking, requirement/case review, development solution discussions, test report submission, regular progress & risk reporting
- Test platforms: APP / Web / Mini-program
- Project discontinued due to company strategic adjustments

Ji De Cai | Test Engineer | 2019.06 – 2021.03 | Shenzhen

- Taimu Valley self-developed WeChat-like chat application: user communication/social + contribution value earning/upload
- Designed and executed test cases for payment, VIP purchase, and shopping core modules
- Participated in performance testing, identified and optimized system bottlenecks under concurrent scenarios

Personal Projects

DevOps Test Tool Platform | Test System & Operations Toolkit | Python 3.12 + Streamlit

- Integrated testing and DevOps automation platform, 8.5K lines of code, **87%** test coverage, serving daily test operations needs
- 7 built-in tools: Affected Project Analysis (multi-project mapping + intelligent deduplication), Service Image Comparison (GitHub container version diff), PR Quick Open, CI/CD Pipeline Management (trigger/query/monitor/approval), Jira Issue Management (create/query/batch update), Jenkins Deploy Control (sequential/concurrent modes + real-time log), Test Tools Suite
- Multi-user configuration isolation, concurrent optimization (ThreadPoolExecutor, 33 boards parallel query), cross-platform startup (Windows/Linux/Mac)
- Standardized logging (SafeLogger), strict exception handling, code quality assurance

QIMAGPT Proxy | AI Proxy Service (Open Source) | Go + Python

- Converted LLM Web UI into **OpenAI-compatible API** gateway, supporting tool_calls passthrough, streaming responses, and multi-turn conversation context retention
- Automatic token refresh, session management, WebSearch interception and conversion
- Python SDK zero-config integration, enabling unified AI toolchain access

MDict Reader | Local Application Development | Next.js + TypeScript + koffi C-FFI

- Full-stack local dictionary reader: Next.js web UI + koffi FFI bridge to call C-language engine (mdict.dll/libmdict.so)
- Implemented browser-side Speex audio decoder (emscripten-compiled libspeex), MDD resource parsing, and process-level caching (64MB LRU cache)

Playwright E2E | E2E Automation Framework | TypeScript + Playwright

- Playwright + TypeScript automation framework covering multi-module E2E test scenarios
- Authored comprehensive coding standards document including navigation wait strategies, assertion standards, and debugging workflow

Education & Certifications

Intermediate System Integration Project Management Engineer — National Certification, 2022–2023
Wuhan University — Bachelor's Degree in Physics, 2012–2017

Interests & Hobbies

Guitar | Team Activity Planning | Open Source Contribution | AI-Driven Testing Innovation