**Frank Q. Lou**

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**Software Development Engineer in Test (Automation QA)**

*Experienced Engineer with proficiencies in design, development, testing, and deployment of computer software.*

Proficiency in C# object-oriented programming skills with fully software development and testing life cycle (SDLC & STLC). Extensive knowledge and hands-on experience in developing automation frameworks for RESTful web applications suitable for both UI and API testing. Proven ability in generating automation scripts with Selenium WebDriver and Specflow for BDD methodology. Innovative troubleshooter, Team leader, with excellent Root Cause Analysis (RCA) ability to deal with complicated issues. Self-motivated, independent, results and detailed driven quick learner. Desire to adapt new technologies. Agile/Scrum team player with exceptional communication skills. Authorized to work in the US.

**Core Competencies:**

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| * + C++, C# Programming   + Selenium WebDriver with C#   + BDD with Specflow   + RESTful API Validation   + Self-motivated & Independent   + CodedUI   + Postman Pro | * + Software Development & Testing Leader   + Design of Manual & Automated Testing   + Bug Reporting, Tracking & Verification   + Chrome, Firefox & IE Browsers   + Result & Detail oriented Team player   + SoapUI Pro API Testing for SOAP/REST Serives | * + Agile/Scrum   + Troubleshooting   + SQL Queries, LINQ   + SDLC/STLC, RCA   + Telerik JustMock   + US Citizen |

**Technical Proficiencies**

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| ASP.NET, OOP, Client-Server Model, NuGet Packages, Azure Services  Visual Studio with C#, HTML5, XML, CSS3, Java, JavaScript, Groovy, JSON, LINQ |
| Behavior Driven Development (BDD): SpecFlow & Selenium WebDriver with C# |
| Manual & Automation testing on Web Service with SOAP/REST style against UI&API |
| Automation Frameworks: Hybrid with MSTest, NUnit, Page Object Model (POM) and Factory |
| Microsoft Team Foundation Server (TFS), Microsoft Test Manager (MTM), SQL Server |
| QA Tools: Newrelic, Stackify, Octopus, TeamCity, Swagger, Postman, Sauce Labs |
| Management Tools: TFS, Git/GitHub, ClearCase, Perforce, JIRA, Bugzilla |
| Database: SSMS, ADO.NET, SQL Server, OLE DB, ODBC, SQL Queries  IDEs: Eclipse, NetBeans, Performance Testing Tool: Apache JMeter |
| Telecom: VoIP, ToIP, SIGTRAN, Echo Cancelation, TFO, TrFO, IPE  Analyzers: Cool Edit, GL T1/E1, Tektronix Spectra2, Agilent Telegra  Digital Signal Processor: Octasic DSP, Mindspeed DSP, TI DSP |
| Operating Systems: Windows, Linux, pSOS, VxWorks |

**Professional Experience**

Royal Alliances, Irving, Texas

**Software Engineer in Test (Automation QA)**, Sep/2017 – Present

The SDET will test Web Services through the use of manual exploratory testing and building automated test suites to ensure it meets the use cases and requirements. The SDET will build test plans and risk assessments, as well as build advanced tools for test automation. The SDET will assist identifying weaknesses in the software products by actively participating in all phases of the development processes. The SDET will build and contribute to a culture of quality by improving processes, building stakeholder buy in, and mentoring peers.

* Setup Automated Testing Framework on Visual Studio
* Develop Testcases with MS Unit or NUnit platform for UI Unit Testing
* Develop Testcases with SpecFlow Feature platform for UI Smoke & Regression Testing
* Develop REST API Testcases with SoapUI Pro (ReadyAPI) and Postman
* RestAPI Testing Tools Experience: Postman / SOAPUI
* Development / Scripting skills: Python / Groovy / Java
* Black-box / white-box testing methodologies
* Test Case Creation / Execution / Automation / Documentation
* Strong software design debugging / testing skills

Paycor, Frisco, Texas

**Software Engineer in Test (Automation QA)**, Jan/2015 – Aug/2017

* Collaborate with Business Analyst and Developers and participate walkthrough over feature requirements. Proactively design, enhance and maintain automation frameworks for RESTful API and UI testing. Actively create test plan and test cases against new features. Perform automated test case generation and execution. Constantly work in Test Plan, Test Cases, Test Scripts and Test Reports for Manual and automated testing. Technically analyze test results and isolate defects prior to escalation for resolution with the development team.

*Key Achievements:*

* Design and develop automation scripts from scratch using Selenium WebDriver & SpecFlow in C#.NET
* Expand, enhance and maintain hybrid automation frameworks for both UI & RESTful API testing
* Collaborate with Business Analyst & Developers walking through & analyzing business requirements
* Condition and acquire test data to create required test scenarios for manual and automated testing
* As QA Leader, Coordinate the execution of test scripts with BA, Project & Development Managers
* Assist Application Developers and technical support staff in identifying and resolving defects with TFS
* Assess and revise test sequence and scope based upon test results and/or changes in product design
* Ensure all released production passing smoke, regression and integration tests with exit criteria

Genband, Plano, Texas

**Senior Software Engineer (Developer & Tester)**, Aug/2004 – Oct/2014

* Provide technical leadership for feature teams on the development of new features from conception to completions. Work through product design, feature documentation and implementation. Perform Unit and Integration tests against new feature and troubleshooting for issues reported. Provide strong customer support after release of the production.

*Key Projects:*

* Design, develop, test and support for Telecom features from start to completions; Developed and troubleshooted the following: Signaling Server, Voice Server, and Echo Server, as well as Device Driver
* **Developed and troubleshot on Genband Signaling Gateway (Signaling Server)** 
  + Developed V5UA (RFC3807) as a new feature on Signaling Server Card
  + Developed and tested on Q.921/Q.931 PRI/ISDN networks
  + Developed and tested on MTP2/MTP3 SS7 networks
  + Developed and tested on M3UA/IUA with SCTP SIGTRAN backhaul to MGC
* **Developed and troubleshot on Genband Multimedia Gateway (Voice Server)** 
  + Designed the feature specifications for Voice Over IP (VoIP)
  + Developed Text Over IP (RFC4103) feature with Baudot Code and RTP T140 frame
  + Implemented VoIP codes such as G.723/G.729/AMR on Voice Server Card
  + Implemented VoIP features such TFO/TrFO on Voice Server Card
  + Collaborated with Mindspeed support team to debug on their M82xxx series DSP
* **Developed and troubleshot on Genband Multimedia Gateway (Echo Server)**
* Led the Feature Team from inception to completion of a new Echo Server CardAnalyzed the new feature requirements of EchoCan with UML/OOA methodology
* Completed Echo Cancellation functionality tests complying with G.168, G.169
* Worked with Octasic support team to resolve the issues on their 6100 series DSP
* **Device Driver Development** 
  + Designed the feature specifications for wireless feature (TFO/TrFO/IPE)
  + Implemented the IPE (In-Path Equipment) function on Echo Server Card and Voice Server Card
  + Developed a device driver for IPE FPGA hardware, and provided API to upper layer
  + Worked with hardware team to test IPE functionalities on FPGA
  + Completed software unit tests and integration tests on IPE functionalities

**Education and Credentials**

**Master of Science in Computer Science**

University of Texas at Dallas, Richardson, Texas

**Training Classes**: ASP.NET framework, C#.NET, Java with Eclipse, Selenium, Cucumber, SpecFlow, Jenkins