**BILL LE**

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**SYNOPSIS**

Software Quality Engineer with 15+ years of expertise in designing and implementing test strategies for on-prem, cloud and hybrid software solutions. Proven capability to build and drive front-end/back-end automation tests to achieve effective software quality goals.

**EDUCATION**

**04/2004 Bachelor of Science** in **Computer Science** with **Math** minor, **Northeastern University**, Boston, MA

**Senior Seminar's Talk**: Building an Attractive Linux Based Internet Router/Firewall

**Bilingual:** Fluent in Vietnamese and English

**SKILLS**

**Programming Languages:** Javascript, java, python, groovy, SQL, PHP, HTML, C++

**Software Developments**: Agile, Continuous Delivery, Shift Left, Cloud/Hybrid computing, Waterfall

**TestOps/DevOps Tools**: GitHub Actions, Jenkins

**Scrum Tools:** Jira, TestRail, Xray, Rally, Bugszilla, IBM Rational Team Concert/Lotus DB

**Automation Tools:** Cypress, Selenium, Appium, REST API, git, Postman, VS Code, IntelliJ, Eclipse, testNG, log4j, jdbc, IBM Rational Functional Tester (RFT)/Clearcase, JUnit, Silktest

**Systems**: Mac, Unix/Linux, Windows, Citrix, Networking,Radio Frequency gun

**Applications**: IBM Security SOAR (Security Orchestration, Automation and Response), IBM Resilient MSSP (Managed Security Service Provider), Camunda BPM, IBM Notes/Domino/Connections/Connections Mail/AppScan, IBM Sametime

**EXPERIENCE**

**01/2022 – 09/2024** ***Senior Quality Engineer/TestOps***, ***connectRN, Waltham, MA***

* Created and managed 35+ Github Actions workflows to streamline 171 Cypress automation scripts for staging and development environment validations.
* Collaborated with DevOps Cloud Engineers and integrated 50+ automation test scripts into CI/CD.
* Maintained Cypress framework with over 20klines of codes (API/Web E2E) for reliability.
* Wrote python utilities which generate dynamic test data on the fly within 30s for automation test usage.
* Organized tests by suites, enabled parallel runs and achieved faster execution times: 5-10mins vs 60-90mins**.**
* Implemented daily TestOps pipelines with smoke suites gated regression suites and saved at least 100mins Github Pay Rate per scheduled run.
* Orchestrated workflow runs to save Cypress logs and screenshots to Github Artifacts and saved $267 monthly cost for Cypress Dashboard subscription.
* Researched and implemented Appium automation framework to test connectRN flagship mobile applications which have 69k+ user base for both Android and iOS.
* Led automation meetings, advocated for coding standards, POM (Page Object Model) design and best practices for coding automation tests.
* Collaborated cross-functionally with Engineering/Product/Design to develop hundreds of comprehensive tests.
* Leveraged KISS (Keep It Simple Stupid) principle, started automation simple, stabilized and scaled up for different environments.
* Incorporated DORA (DevOps Research and Assessment) metrics in workflow runs to identify flaky automation scripts and weak feature areas and included them in Slack notifications to 3 different TestOps and DevOps channels.

**11/2017 – 12/2021** ***Senior Software Engineer in Test***, ***IBM Security Headquarters, Cambridge, MA***

* Maintained automation jobs (Selenium & Cypress) in RedHat OpenShift Pipelines framework.
* Designed test strategies with complex sets of BPMN workflows for functional testing of IBM Cloudpak Security Playbook Designer (<https://medium.com/design-ibm/ibm-qradar-soar-playbook-designer-wins-2022-red-dot-award-bde4717fe983>)
* Worked with Legal team tested updated Privacy modules: GDPR, PIPEDA, Risk Assessment, HIPAA
* Coded python scripts to generate test data and performed QA tests for in-product script engine.
* Participated IBM Resilient Fn(x) Integration Hackathon 2018 and wrote integrated codes with IBM Watson Speech Synthesizer using Python (Our 4-member team won the 1st prize out of 22 teams).

**01/2016 – 11/2017** ***Senior Automation Engineer***, ***World Travel Holdings, Wilmington, MA***

* Created Selenium automation framework to drive front-end GUI test for internal web booking applications used by 2k+ experienced travel agents.
* Designed automation with JDBC for back-end data queries and verifications against front-end GUI data.
* Created and managed Jenkins daily automation jobs for builds test and environment validations.
* Leveraged REST API and built scripts to validate health check on United and Hilton partner services.
* Coded over 34k java line automation test in an Agile development (2-week sprint).
* Discussed with QA members, ran demo, enhanced automation from feedback for more test coverage.

**07/2003 – 12/2015** ***Advisory Software Engineer***, ***IBM Corporation, Littleton, MA***

*Advisory Software Engineer, 05/2010-12/2015*

* Wrote 20k lines of Java codes automation test IBM Notes and Notes Web applications.

1. Analyzed 50+ existing Java GUI automation scripts and increased performance from leveraging REST API.
2. Supported RFT automation infrastructure, and created model data-driven automation for QE members
3. Led Group test rally into extensive testing on final builds before releasing them to customers.
4. Led and managed quality assurance goals for IBM Notes Connections Content Management project
5. Awarded IBM First Patent Invention Achievement and First Plateau Invention Achievement.

*Staff Software Engineer, 06/2006-05/2010*

* Coded 5k Java lines of automation test for IBM Notes on Cloud/On Premise/Hybrid configurations.

1. Led and worked with QE members in Beijing and Pune using RFT on multiple test projects.
2. Published 2 technical papers promoted 2 new features of redesigned IBM Notes 8.
3. Represented IBM at CalConnect 2005 & 2007 conferences and achieved IBM Notes interoperable tests.
4. Represented IBM interacted with customers at IBM Lotusphere Orlando 2007 and Admin2006 Boston.

*Software Engineer,* 07/2003 – 06/2006

* Performed QA tests for IBM Notes applications using waterfall and agile methodologies.
* Converted 10k lines of Silk coded automation into Java codes to be used with new RFT tool.
* Provided L2/L3 technical support to internal and external customers of IBM Notes application.
* Contributed to internal knowledge base articles, tips, workflows, how-to for help center support of IBM Notes.

**PATENTS**

* **Granted 07/09/2015**, [Scheduling events for multiple invitees](https://www.patentsencyclopedia.com/app/20120304088), **US 20120304088** *(co-authored)*
* improves meeting invitations with large group of invitees more effective.
* **Granted 01/07/2014,** [Creating follow me meetings in an electronic calendar](https://www.patentsencyclopedia.com/app/20130151302), **20130151302** *(co-authored)*
* improves calendar scheduling to be followed by other events in more connected relationships.
* **Filed 08/31/2011,** [Categorizing email recipients,](https://www.patentsencyclopedia.com/app/20130054710) **US 20130054710** *(co-authored)*
* improves mass email communications to target right group of intended recipients rather than spam unnecessary incorrect recipients.
* **Filed 12/02/2010,** [Making a Recurring Reservation for a Resource](https://patents.google.com/patent/US20120143638), **US 20120143638** *(co-authored)*
* improves meeting’s room and resource reservation more effective in recurring schedules.
* **Filed 03/25/2008,** [Meeting Management Distinguishes Staff from Meeting Invitees](https://www.patentsencyclopedia.com/app/20090248426), **20090248426**
* allows meeting schedulers to distinguish their list of invitees and optimize it so that meetings could be organized for productive outcome.