

## Hieu Van Nguyen

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## PROFILE

I am a highly passionate software expert, focusing primarily on Web Applications, Web Services, Cloud Computing (used Azure at Microsoft and OCI at Oracle, used AWS and GCP for my Personal projects), Big Data (COSMOS and SCOPE), and Mobile Development. My 10+ years of professional experience, on top of my undergraduate and graduate studies (in Vietnam and in the U.S.) have equipped me with a profound knowledge of object-oriented design and development, debugging and troubleshooting product issues. My strongest technical skills are C# and .Net Framework, Java, Multi-tier applications, developing and testing websites (ASP.NET, HTML5, CSS3, jQuery, JavaScript, TypeScript, Node.js, Silverlight, IIS, MVC, MVVM, Ajax, Kendo UI, Knockout, React, Firebug, Fiddler, Selenium), MS SQL Server, COSMOS, and SCOPE. I have experience in many platforms including Windows 8.1/10, Windows Server 2008/2012, Windows Mobile 6.1/6.5, Blackberry, and Linux. I'm also proficient in using tools like WTT, MS Test, ProductStudio, CoreXT, MS Build, Jira, Git, Jenkins. In addition, I possess strong analytical, problem solving, and communication skills; a passion for solving puzzles, algorithms, and developing on a rock-solid foundation; and am able to work under pressure in a fast-paced environment either independently or in a team.

## ACHIEVEMENTS

### Honors & Awards

1. Excellence In Innovation Award for eBayHere local marketplace project (12/2018)
2. Innovation Rotation Award for eBayHere local marketplace project (12/2018)
3. First Prize for eBay Flash Sale hackathon project (09/2019)
4. Third Prize in Algebra at national mathematical Olympiad (05/2003)
5. Third Prize in Calculus at national mathematical Olympiad (05/2003)

### Patent

1. Crowdsourcing Locations For Seller Privacy (IP-P3430US1)

### Publication

1. A Hybrid Approach of Noun Phrase Translation in Cross-Language Information Retrieval (Springer 2007)

## SUMMARY OF QUALIFICATIONS

- Currently working as a **Fullstack SDE** at Apple Device Service team (Consultant)
- 10+ years of professional experience in **Object-Oriented design and development**
- 5+ years of professional experience in developing **Test Automation** at Microsoft and RIM
- 5+ years of professional experience in software development using **C#, ADO.NET, ASP.NET, WPF, Silverlight, MVC, MVVM, Firebug, Fiddler**
- 5+ years of professional experience in **MS SQL Server** (T-SQL, Stored Procedures, SQL Profiler, Functions, ETL, Database Design and Administration)
- 6+ year of professional experience in software development using **Java, Spring, Spring Boot, Selenium (At Oracle, EBAY, and RIM)**
- 4 year of professional experience in **Node.js, React, JavaScript, jQuery**

- Professional experiences in using Azure (at Microsoft) and OCI (Oracle) and using AWS and GCP for my Personal projects
- 3+ years of professional experience in **Windows Services, Web Services, WCF, WSDL, SOAP, REST**
- 5+ years of professional experience in **Unit/BVT/API/UI/E2E/Performance/Stress/Security** testing (at Microsoft, eBay, Oracle)
- 2 years of professional experience in **Source Depot, Product Studio, WTT, MS Test, MS Build, and CoreXT**
- 1+ year of professional experience in developing modern data warehouse using **COSMOS, SCOPE**
- Proficiency in deploying applications with **Visual Studio Team System 2008/2010/2013, Team Foundation Server**, and **IIS 7.0/8.0**
- Proficiency in **Exception Handling, Debugging Strategy**
- Proficiency in **conceptual design**: use case, activity, sequence and class diagrams
- Strong knowledge and professional experience in **Design Patterns, Test Design Patterns, SDLC**
- I have also learned **GO, SWIFT, PHP, MYSQL**

## **PROFESSIONAL EXPERIENCE**

### **FullStack SDE (Consultant) - APPLE (12/2022 - PRESENT)**

I work as a primary dev for the new features and also migrate old pages in the legacy app to the new app.

- Drive the design for the new feature and improvements (e.g. adding new pages to allow Apple Care team to resend activation files to partner carries)
- Develop new UI using React, TypeScript, JavaScript, HTML, CSS
- Develop new Web service using Java and SpringBoot framework
- Investigate and fix bugs
- Support QA team in testing the features

#### **Technical Environment:**

IntelliJ, SpringBoot, Java, HTML, CSS, JavaScript, TypeScript, React, Sql Developer, Oracle DB

### **SENIOR MEMBER OF TECHNICAL STAFF (Senior SDE) – ORACLE (03/2020 - 11/2022)**

I am a senior MTS at the Identity Access Management team (IAM). IAM is the tier 0 service of OCI (Oracle Cloud Infrastructure) that does authentication, SSO, profile and policy management. My main responsibilities are:

- Drive the design for the new features and improvements (e.g. new microservices for my team to break the monolith system, Design a solution to get sev2 Alarm every time a component is down)
- Investigate security reports from security central and artifact scanning , I either need to fix the security reports by updating code, maven dependencies, config update, or filed SDRs to explain why this is not a problem
- Keep The Lights On (On-call, Deployment, Bug fixes, Customer support)
- Develop and test Web Services using Java and Spring framework

- Develop and test Web UI using Node.js, JavaScript, TypeScript, React, HTML, CSS
- Develop test automation using Python, Selenium
- Do Code Review, Dev Design review

**Technical Environment:**

IntelliJ, Oracle DB, Spring, Java, Python, Selenium, HTML, CSS, JavaScript, TypeScript, React, Git, JIRA, Jenkins

**SENIOR SOFTWARE ENGINEER – EBAY (11/2016 – 03/2020)**

I am a Full-Stack developer in the eBay Core Shipping team. Our team focuses on creating the best seller experience. The goal is to make shipping and logistics a great experience for both sellers and buyers. My main responsibilities are to develop new applications (web application and mobile application), tools and services for our sellers to list items and set preferences. In addition, I am a member of the newly formed eBay Front-End community, we want to create and share the modern and standard UI across all eBay products.

- Own products E2E (get requirements, design, develop, test, deploy, maintenance)
- Do performance, stress, and security testing before launching the new features. eBay scan for these problems and also had the list of common security problems (e.g. XSS, CSRF, CORS) that I need to address all of them in order to launch
- Daily Triage/Scrum meeting
- Troubleshooting, debugging live site issues and provide hot fixes
- Investigate the root causes of the issues in order to make a long-term fix
- Code review, Dev Design review
- Develop and test Web UI using Node.js, JavaScript, jQuery, React, Marko, HTML, CSS
- Develop and test Web Services using Java and Spring framework

**SOFTWARE ENGINEER II – MICROSOFT (04/2013 – 09/2016)**

As a software engineer II at Microsoft Data Insights team, my main responsibilities are to develop and test the data warehouse, data pipeline, Web APIs, automation tools, and a web portal for data visualization (Business Insights, Customer Insights, Engineer Insights, and Key Performance Indicators). I'm also working on a machine learning project.

- Daily Triage/Scrum meeting
- Troubleshooting, debugging live site issues and provide hot fixes
- Investigate the root causes of the issues in order to make a long-term fix
- Code review, Dev Design review
- Develop and test new feature for the web portal using C#, MVC, MVVM, jQuery, TypeScript, Knockout, AngularJS, Kendo UI, AJAX, HTML, CSS, Firebug, Fiddler
- Develop and test the Web services using ASP.NET Web APIs

- Develop and test Data warehouse and Data pipeline using MS SQL Server 2012/2014
- Develop and test Modern Data warehouse using COSMOS, SCOPE
- Develop and test automation tools in order to monitor pipelines (latency check, data validation, anomaly detection)

**Technical Environment:**

- Windows Server 2008/2012 R2, Visual Studio 2012/2013 Ultimate, SQL Server 2012/2014, COSMOS, SCOPE, MVC 4, MVVM, Firebug, Fiddler, HTML, CSS, JavaScript, jQuery, TypeScript, Knockout, Kendo, Profiler tools, SSAS, TFS, Code Flow Review

**SDE 2 – MICROSOFT (INSPUR WORLDWIDE SERVICES LTD: 3/2012 – 3/2013)**

**COMMERCE PLATFORM**

Microsoft Commerce Platform is the platform for Microsoft partners to register their products and services on the market place so that customers can search for, download and buy them. As a Live site developer in the team, my main responsibilities are to:

- Daily Triage/Scrum meeting
- Troubleshooting, debugging live site issues and provide hot fixes
- Investigate the root causes of the issues in order to make a long-term fix
- Code review, Dev Design review
- Design, and develop new features (MVC web site, WCF services, Syndication Feeds, SEO improvement)
  - o UI (HTML, CSS, Firebug)
  - o Service Layer (SOAP, REST)
  - o Back-End (MS SQL Server)

**Technical Environment:**

- Windows Server 2008 R2, Visual Studio 2010 Ultimate, SQL Server 2008 R2, MVC 3, Firebug, CSS, JavaScript, jQuery, Profiler tools, SSIS, Product Studio, CoreXT, Source Depot, Code Flow Review, Windows Installer XML toolset

**SDET 3**

**MICROSOFT FOREFRONT IDENTITY MANAGER - FIM (8/2011 – 3/2012) Redmond, Washington, USA**

FIM offers users a comprehensive solution for managing identities, credentials, and identity-based access policies across heterogeneous environments. FIM empowers users with self service password reset and embeds self-help tools in Office so you can manage routine aspects of identity and access, gives IT Professionals rich administrative tools and enhanced automation, and delivers .NET and web services-based extensibility for developers.

**Responsibilities:**

- Develop and update Common Library for the UI testing framework, they are used to test the Forefront portal, password registration & reset portal.
- Develop and update the configurable TestDriver, they are used to drive functional testing and performance testing
- Develop test automation for Web Services API
- Do Functional testing and investigate the failures
- Do Performance and Load testing (VSTS Load Test, SQL Profiler), analyze performance data to figure out which aspects need to be improved.
- Do Fuzz testing, SQL injection, JSON injection, cross site scripting.

#### **Technical Environment:**

- Windows Server 2008, Visual Studio Team System 2008 Team Suite, SQL Server 2008, Profiler tools, Product Studio, WTT, CoreXT, Source Depot.

### **SOFTWARE ENGINEER**

**RIM** (11/2010 – 07/25/2011)

As an automation and Extensions Developer at RIM, my main responsibilities are to:

- Develop Java extensions for building software test automation for the presentation layer and surrounding business logic used in BlackBerry Internet Services (Eclipse, Selenium, Robot Framework, JDBC, Oracle SQL Developer)
- Develop unit tests for Service Layer and DAO Layer (JUNIT)
- Develop SOAP client and REST client for testing web services used in the Blackberry handheld
- Work closely with development and functional test teams to understand the scope of new features and automate functional test cases
- Review test bank for automation feasibility; help plan and scope the automation roadmap for the Web Applications team; execute the automation roadmap
- Do code review, test case review, requirement review
- Sprint planning meeting and daily Scrum stand up

Technical Environment:

- Eclipse, JSP, JavaScript, XHTML, JSON, Selenium, Robot Framework, Python, JDBC, Oracle

### **SDET 3**

**MICROSOFT CORPORATION** (5/2008 - 5/2009, 8/2009 - 8/31/2010) Redmond, Washington, USA

#### **WINDOWS LIVE**

I'm currently working with Infrastructure team and testing a ***Unified Reporting Platform*** which is highly flexible, customizable and providing both real time and time-based performance, operational, load, reliability and availability dashboards

- Technical Environment:
  - o VS 2010 (C# and .NET 4.0) and KAF 2.0 for doing UI automation

- o MS SQL Server 2008 - we have three databases with different level of granularity (QSSL1, QSSL2, and QSSL3) and a web store. My task is to develop stored procedures to extract information and display it using report definition language, based on the configuration file and parameters, data will be extracted from the appropriate granular database.
- o Report Definition Language – This helps creating highly flexible, customizable reports
- o Silverlight – This helps creating client-side effects like zooming, switching Chart types

Previously, as a SDET in Windows Live GeoSearch test team, my main responsibilities are testing, designing and writing test automation for Publisher/Subscriber services, AsyncQueue and AsyncQueue Push services, Scalable In-Memory Store services. I also do code review, test case review for my teammates.

- Responsibilities:
  - o Design BVT, Functionality, Performance, Security tests for new Windows live features
  - o Do code review, test case review
  - o Create/Modify test automation for WCF services, RSS feeds, SQL stored procedures
  - o Create/Enhance existing test library and test infrastructure
  - o HTTP debugging using Network Emulator For Windows Toolkit and Fiddler
- Technical Environment:
  - o Visual Studio Team System 2008 Team Suite, SQL Server 2008, Windows 7 Enterprise, WTT, MS Test, Product Studio, Source Depot, CoreXT

#### **MICROSOFT SKYMARKET**

SkyMarket is Microsoft's marketplace for Windows Mobile. I'm a member of the Server and Online Services Test Team. My main responsibilities are testing Stored Procedures, Web Services, Functional APIs, and creating SQL scripts for populating data.

- Responsibilities:
  - o Developing test automation for testing Stored Procedures
  - o Creating Test Stored Procedures and SQL Scripts for populating test data
  - o Developing unit tests for testing Web services, Functional APIs
  - o Running regression tests, modifying test automation, and regressing bugs
  - o HTTP Debugging using Fiddler
- Technical Environment:
  - o Visual Studio Team System 2008 Team Suite, Team Foundation Server, SQL Server 2008, Windows Server 2008, Fiddler

#### **MICROSOFT SURFACE FUNDAMENTAL TEST TEAM**

The Fundamental test team is responsible for Performance, Stress, and Security tests. It also provides engineering services for other test teams. In one year with Fundamental test team, I dealt with database design, development, and administration; developed and maintained a website; Surface applications use either WPF or XNA, I worked with WPF Surface applications so I use both C# and WPF to create test tools and test automation.

- Responsibilities:
  - o Developed and maintained SurfPerf Website (WebForms, Custom Controls, JavaScript, CSS, Telerik, ASP.NET Ajax Controls, and Reporting)
  - o Developed performance tools, which ran in the background, captured performance data of other running applications, and then saved those data in the database
  - o Developed web services to help client machines communicate with WTT

- o Scheduled daily automation tests and investigated job failures, open bugs for the owners if necessary
- o Created AutoBug tool, which analyzed results of test automation and automatically generated bugs
- o Created test cases, metrics, and scripts
- o Created WTT and DTW jobs/automation tests
- Technical Environment:
  - o C#, Visual Studio 2008, WPF, SQL Server 2005/2008, WTT, Product Studio, Source Depot

**CROSS-LANGUAGE INFORMATION RETRIEVAL – Research Team Member (1/2007- 9/2007)** University of Technology, HCMC, Vietnam

This project aimed at creating services to help Vietnamese people type a query in Vietnamese and retrieve results in targeted languages (such as English).

- Responsibilities:
  - o Recommended a hybrid model for automatic translation. We have published an article about this model on Springer - an international publisher.
  - o Designed a class diagram for a module to automatically translate noun phrases from Vietnamese into English
  - o Developed front-end windows forms and user controls
  - o Created MS SQL database for noun phrases and dictionary
  - o Executed test cases and performed performance and functionality analysis
- Technical Environment:
  - o C# (VS 2003), ADO.NET, MS SQL server 2005, MS Visio 2003

**BUILT-IN SELF TEST – Software Engineer (2/2005 - 4/2005)** Silicon Design Solution, HCMC, Viet Nam

- Responsibilities:
  - o Member of the SOC (System On Chip) team
  - o Created models for the circuits
  - o Executed simulation tests
  - o Analyzed test results to see if they matched the standard
- Technical Environment:
  - o Verilog HDL, PERL, Sun Solaris

**MAPINFO – SDE (2/2004 – 6/2004)** Softech Danang, Viet Nam,

- Responsibilities:
  - o Interned on the GIS team
  - o Entered digitized map to database
  - o Researched and implemented the A\* algorithm (to find shortest paths with heuristics)
  - o Helped the team in developing a website to display a digitized map and responses to user queries
- Technical Environment:
  - o C# (VS2003), MS SQL Server 2000

**EDUCATION**

- **Master of Computer Science**, Maharishi University of Management, Fairfield, Iowa (10/2007 – 12/2009). GPA 3.79

- **Master of Computer Science**, Ho Chi Minh National University of Technology, Vietnam (09/2005 – 09/2007). Graduated with a position in top Five.
- **Bachelor of Science in Information Technology**, Da Nang University, Vietnam, (09/2000 – 08/2004). Received *Best Student Award* for getting first in university 4 years consecutively and *January Star Award* for excellent academic performance in 2004.
- **National prizes and Scholarship from Intel Vietnam**

#### **OTHER INTERESTS & ACHIEVEMENTS**

- Reading, swimming, and solving Algorithm problems using C++/PASCAL
- Team leader of several 5-8 person academic projects