Marissa Twitchell

Curriculum vitae

Software development engineer with 10 years of industry experience
https://MarissaTwitchell.com | Twitchell.Marissa@gmail.com | 425-577-4491

Education

Master of Science Degree in Information Systems Management
Brigham Young University, Provo
Capstone: Created an Android version proof-of-concept for a Meal Planning application
(https://github.com/satoukum/TastyPlanner)
Completed June 2013

Bachelor of Science Degree in Information Systems
Brigham Young University, Provo
Completed June 2013 (as part of an integrated masters program)

Experience

Microsoft, Redmond, Washington

December 2017 - Present

Microsoft Azure Disaster Recovery Build Engineer
- Provide the capability to produce an Azure build in a disaster event with the goal being to still be able to release Azure products even if certain services are down (Azure creates more than $25 billion in revenue per quarter, making outage recovery critical)
- Designed and created new automation written in C# to trigger test builds that were previously performed manually as well as new tooling using Azure Data Explorer to communicate status to leadership on a dashboard

Microsoft Excel Desktop Application Software Development Engineer
- Developed features and priority bug fixes to the Excel desktop application, an application used by 120 million users and written in C and C++
- Features developed utilizing industry best practices (version control, A/B feature gating, automated testing, error logging, code reviews, localization, customer feedback, accessibility, security)

Expedia, Bellevue, Washington

April 2015 - November 2017

Expedia Full-Stack Web Application Developer

- Enhanced a product used by 4.6 million users monthly that saves search history across devices, increasing customer repeat rate (used front-end technologies such as HBS, JavaScript, CSS, LESS, and spent time focusing on making new feature enhancements accessible, available on multiple browsers, responsive, and released behind A/B tests)
- Built responsive headers and footers for Expedia brands seen by over 300k visitors daily and assisted in a project to move brand headers and footers to a cloud-based solution to improve page loading speeds
- Performed work on a legacy website application maintained by hundreds of developers. Migrated portions of the website to have responsive pages and released new features behind A/B tests
- Automated a manual process in a team of two, which required building out a service endpoint to retrieve data, a Java/Spring rules engine, storage in AWS S3, a user interface, and was scheduled by a Jenkins job

Expedia Mobile Application Developer (iOS/Swift 2)

- Implemented the look-and-feel of a front-page feature on an iOS application with more than 400k downloads and gained familiarity with custom extensions, exposing data to the view, and writing Visual Format Language

Expedia Test Automation Developer

- Wrote automated regression testing (one project used Ruby/Watir/Cucumber and another used PhantomJS) to save maintenance time and help ensure product quality
- Cucumber acceptance tests followed the "Given-When-Then" format and the program was triggered down-the-line by a Jenkins job
- PhantomJS was used to verify deep-linking project redirected users to the expected endpoint

Pariveda Solutions, Bellevue, Washington

May 2012 - August 2012, August 2013 - April 2015

Pariveda Solutions Developer Consultant

- Pulled data from big data sources (>30 TB) using both Hadoop/Hive and IBM/Netezza data warehouses writing HiveQL and SQL using WinSQL and Aginity as database clients
- Used the following query languages: Azure Data Explorer (Kusto), Microsoft SQL Server, Splunk Query Language (for reading system logs), MongoDB Querying, Spark SQL

(AWS S3 storage), Netezza SQL (IBM Netezza database), and HiveQL (Hadoop/Hive database)
- Automated a four-hour, manual process using Automation Anywhere, a scraping tool
- Performed data mining and business intelligence on customer database using QlikView

Pariveda Solutions Mobile Application Development Consultant

- Developed company-wide reference implementation to handle push notifications for Android (https://parivedasolutions.wordpress.com/native-android/)

The Church of Jesus Christ of Latter-day Saints, Riverton, Utah

April 2011 - December 2011

Developer

- Provided bug fixes to a Java/Spring application used by Managing Directors with special interest in contributing clear, maintainable code
- Created automated test cases using the Ruby/Watir framework for a PeopleSoft Human Capital Management 9.1 upgrade

Walmart, Bentonville, Arkansas

May 2010 - August 2010

Walmart Unix Home Office Developer

- Gathered requirements for, planned, developed, and launched a server-maintenance-scheduling application using .NET and C#, creating an automated scheduling system for 3500 servers that is estimated to save over 300 hours of associate time

Brigham Young University, Provo, Utah

May 2010 - August 2010

Data Mining Research Assistant

- Gained experience as a data mining research assistant by working for computer science professor Christophe Giraud-Carrier
- Participated in a data mining competition and later used the skillset to place on the leaderboard at 190/263 for a Kaggle competition (https://www.kaggle.com/satoukum)

Skills

- Programming Languages: Java, C#, C++, C, Ruby, Swift, Android
- Web Development: HTML, CSS, JavaScript, Bootstrap, React, FTL, HBS
- Database Querying Languages: SQL, Mongo NoSQL, Splunk SPL, HiveQL, Spark SQL
- Version Control: GIT, Source Depot, Perforce, SVN
- Development Tools: The Visual Studio Suite (Visual Studio IDE, Azure DevOps), The Atlassian Suite (Jira, Confluence, BitBucket), IntelliJ IDEA, Jenkins, Splunk, SSMS

Volunteer

- Created my neighborhood's HOA site (https://tremontsammamish.com/)
- Tutored walk-in students with homework help Monday evenings weekly for five months as a StudyZone tutor for the King County Library System
- Provided career and academic mentorship weekly to girls interested in coding through the Girls Who Code program for two consecutive summers
- Spent a Saturday each month for five months volunteering in a group for organizations in the Seattle area as a Team Works Volunteer for Seattle Works nonprofit

Public Speaking

- 2022 - Presented design and possible implementations for technical project to team
- 2022 - Spoke on Easter Sunday to congregation at church
- 2019 - Featured in narrative (https://universe.byu.edu/narratives/marissa-twitchell/)
- 2019 - Completed three years of volunteer biweekly primary teaching assignments
- 2018 - Spoke as part of a panel titled "Inside Microsoft. The Alum's Perspective"
- 2015 - Spoke at an information session to women in the BYU IS program
- 2014 - Spoke in a classroom about technology at a local elementary school
- 2014 - Presented at a high school symposium for women in STEM
- 2014 - Spoke on Easter Sunday to congregation at church

Awards

- 2022 - Awarded over 1k reputation (~85k people reached) on the StackOverflow website (https://stackoverflow.com/users/1483546/satoukum)
- 2015 - Awarded "ESOP Maximizer" at Pariveda Solutions for client contributions
- 2011 - Awarded "Most Hits on YouTube" at The Church of Jesus Christ of Latter-day Saints for tutorials with ~400k views (https://www.youtube.com/user/DataMiningLab)
- 2010 - Awarded "Practices 10-Foot Rule" at Walmart corporate for friendly disposition