Shuhao (Henry) Sun

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Technical Summary

Languages: Java (with interest in Kotlin), SQL, C#, C++, HTML/CSS/JS, VHDL

Tools: Git, Perforce, SQL Developer, MariaDB, TeamCity, Jira, Unity, Firebase, IntelliJ IDEA, Chrome Dev Tools

Work Experience

Oracle NetSuite - *Software Developer (Supply Chain Management)*

May 2018 – Aug. 2018

- Contributed ~20% towards biweekly sprint velocity, closing in on the team's major milestone in Sept. 2018.
- Developed in a RHEL virtual machine environment, focusing on test-driven development in Java and SQL.
- Maintained 2-to-6-hour sanity/smoke/coverage TeamCity builds for a 20-year-old monolithic web application.
- Refactored team's core package hierarchy using lessons learned from biweekly Uncle Bob workshops.

Ultimate Software - *Software Engineering (Microservices)*

Sept. 2017 – Dec. 2017

- Developed for a beta-release web-app using Angular 1.5, HTML/JS/CSS, Java/Spring, MariaDB, and RabbitMQ.
- Implemented support for time zones/DST and developed a permission-respecting employee profile page.
- Coordinated meetings with Mobile, QA, and BA team members to discuss ambiguities and potential solutions.
- Researched and delivered a Lunch & Learn presentation on MochaJS to an audience of 23 team members.

Ultimate Software - *Software Test Engineering*

Jan. 2017 – Apr. 2017

- Wrote API tests in Postman, database regression tests with Liquibase, and C# automation in Visual Studio.
- Developed a utility application in Java that processes spreadsheet data into MariaDB.
- Developed a stored procedure in SQL that finds diffs between similar tables to validate database integrity.

ITC Systems - Junior Software Engineering

May 2016 – Aug. 2016

Took initiative to automate performance testing for an in-house barcode scanner, querying ~8000 times/day.

Projects

Renju 3D Unity Game (Published on Play Store)

Jul. 2018 - Present

- Produced a 3D variant of Gomoku / Connect 5, played on a 15x15 Go board, with C# in Unity 2018.
- Efficiently enforced the rules prohibiting double 3's, double 4's and 6-in-a-row's along with its edge cases.
- Leveraged NoSQL for <u>online multiplayer</u> by integrating the Json.NET C# library with Firebase REST APIs.
- Reduced file size by ~55%, verts by ~80%, and tris by ~60% to increase performance on mobile devices.

Raspberry Pi 3 Smart Mirror

Oct. 2017 – Dec. 2017

- Woodworked and built a motion-enabled mirror displaying the weather, world clock, and class schedule.
- Configured VPN access in a Linux environment, allowing for remote monitoring and development.
- Contributed to Michael Teeuw's open source MagicMirror² platform, with a <u>bug-fix</u> merged to master.

Education

University of Waterloo, Waterloo, Ontario

Sept. 2015 - Present

• Candidate for B.A.Sc. in Computer Engineering (Transferred from one year in B.Sc. Honours Science).

Interests & Achievements

- Senior Boys AAA Volleyball TDSB City Championship Finalists (2014)
- RCM Level 10 Comprehensive Piano Certificate (2014)