Oliver Xie

oxie@sfu.ca • Vancouver, Canada • LinkedIn • Github

EDUCATION

Simon Fraser University   **Sep 2019 - Expected Aug 2023**
Bachelor of Science in Computing Science   3.90 GPA

- USES Scholarship with Distinction (all tuition, estimated value $35,000+)
- CSSS 1st Year Representative: Organized two freshmen student socials and Feb 2020 hackathon
- CS Peer Tutor: Tutored students taking first and second-year computing science classes
- HIVE Leader: Mentored incoming students with virtual workshops and served as a Wayfinding Champion

TECHNOLOGIES AND LANGUAGES

- C#, JavaScript (Node.js + React), C, C++, Java, Python, HTML, CSS, SQL (SQL Server, Postgres), Docker, Pandas, Spark, Git, Windows, Linux, Azure

WORK EXPERIENCE

Change Healthcare   **Sep 2020 - Apr 2021**
Software Development Engineer (Co-op)

- Planned, developed, refactored, and deployed C# (ASP.NET Core) identity server upgrade using SOLID principles and maintaining legacy compatibility that affects all Change Healthcare Radiology Solutions installations
- Secured file upload validation for C# PACS backend while supporting various DICOM and image formats
- Ported 30+ hotfixes over a 2-week sprint to the latest version to support a large-scale customer product upgrade
- Refactored Visual C++ modules with help from static analysis, enhancing security and performance by minimizing resource leaks and null pointer dereferences in over 50 places
- Finished second place in company-wide Pacman hackathon and contributed to team's pathfinding AI in JavaScript

PROJECTS

Bilby Compiler   **May 2021 - Aug 2021**

- Built a compiler using Java that translates a procedural language to one-address (stack machine) code
- Implemented variables, branching, loops, type promotion, and function calls
- Applied test-driven development to validate requirements for each iteration

Pokémon Mystery Dungeon Speedrun Tracker   **Apr 2020 - Aug 2021**

- Prototyped in Django, now deployed on Azure Functions (C#) with GitHub Actions CI/CD
- Polled speedrun.com API periodically and used Cosmos DB to cache results
- Completely automated manual process (saving 2h/month), easily scaled to handle category reorganizations

Meal Scheduler   **Aug 2020 - Dec 2020**

- Constructed REST API using Postgres/Node, enabling cooking sign-up, recipe display, and holiday support
- Used React to create a responsive, modular rich web client and Postman, Mocha/Chai for automated API testing
- Increased meal planning efficiency at home by distributing workload and sharing recipes

BGC Coursys   **May 2020 - Aug 2020**

- Demonstrated agile principles as team leader and solicited feature development and feedback from corporate client
- Automated employee course-scheduling using Node, Postgres, EJS/HTML/CSS, reducing effort needed to manage enrollment by 40%
- Controlled project scope to allow on-time delivery despite team disruption (lost 40% of team capacity)

INTERESTS

- Hiking, piano, saxophone, baking, public speaking, video games (speedrun world record holder)