Oliver Xie

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

EDUCATION

Simon Fraser University   **Sep 2019 - Aug 2023**
Bachelor of Science in Computing Science   3.80 GPA

- USES Scholarship with Distinction (full-ride tuition, estimated value $35,000+)
- CSSS 1st Year Representative: Organized two freshmen student socials and Feb 2020 hackathon
- CS Peer Tutor: Mentored students in first and second-year computing science classes
- HIVE Leader: Served as an virtual orientation facilitator and a Wayfinding Champion (tour guide)

SKILLS

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

WORK EXPERIENCE

Amazon   **Jun 2022 - Aug 2022**
Incoming Software Development Engineer (Co-op)

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

- Led multi-month ASP.NET Core identity server upgrade for all Change Healthcare Radiology Solutions instances
- Refactored code to use SOLID principles while maintaining existing configuration and Couchbase database access
- 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
- Improved security and performance in Visual C++ modules by eliminating over 50 resource leaks and unsafe pointers

PROJECTS

Project Blue   **Sep 2021 - ongoing**

- Created a state machine using Python and an image classifier using Keras to automate gameplay for a mobile game
- Made a data pipeline to retrieve and preprocess 15,000 images from local gameplay and external videos
- Trained a neural network that classifies with 95% accuracy, speeding up clear times by 50%

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

BGC Coursys   **May 2020 - Aug 2020**

- Managed an agile team; solicited feature development and feedback from corporate client
- Automated employee course-scheduling using Node/Express and Postgres, reducing management time by 40%
- Used EJS and socket.io to show course waitlists and update enrollment in real-time
- Controlled project scope to allow on-time delivery despite losing 40% of team capacity
- Performed API testing using Mocha, Chai and Postman and UI testing using Selenium

INTERESTS

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