Wren Liang

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EDUCATION

University of British Columbia   Sep 2018 – May 2023
B.ASc. in Computer Engineering
- Dean's Honour List, Presidential Scholars Award (**Top 1%**), Martin Sikes ECE Scholarship, Tuum Est Award
- Cumulative Average: **85%**

EXPERIENCE

Nuro, Inc. ⧉   May 2022 – present
Software Engineer Intern
- Enhancing the **AV simulation** engine's realism by adding ML classifier labels to simulated agents using **C++**
- Developing heuristics to simulate turn/brake lights based on vehicle kinematics and agent intent
- Implemented fuzzing for vehicle model types in simulation tests, accelerating scene creation by 33%

Activision Blizzard (Demonware) ⧉   May 2021 – Dec 2021
Software Engineer Intern, Backend
- Built **Python web services** and **C++ SDKs** for "Clans" multiplayer feature in *Call of Duty: Vanguard* and *Warzone*
- Designed **middleware** to infer game client context, enabling **cross-title progression** over multiple platforms
- Load-tested features with **3 million** concurrent users at **3k logins/sec** and deployed to production using **K8s**

Orbis Investments ⧉   Jan 2021 – Apr 2021
Software Engineer Intern, Full-Stack
- Automated **¥100 million** fund valuation using **Camunda, JS,** and **Kafka**, saving accountants **>1hr every day**
- Created scheduled **C#** scripts to fetch daily trading data on **2000+ securities** from **Bloomberg**
- Built productivity features for portfolio manager dashboard with **AngularJS**, reducing tasks from **5min to 10s**

Orbis Investments   May 2020 – Aug 2020
Software Engineer Intern, Backend
- Developed **REST** APIs for Client Reporting team using **C#**, **.NET Core**, and **SQL Server**
- Orchestrated a SQL **data migration** of **>20 million rows** of production client data
- Redesigned a CMS monolith into **microservices**, improving scalability while decreasing downtime by **50%**

EXTRACURRICULAR

UBC Launch Pad ⧉

Co-President   May 2021 – May 2022
- Managed UBC's leading software engineering club of **70+ members**
- Kickstarted social media campaigns, increasing our year-over-year applications by **2.3x**
- Led development of in-house interview scheduling software to streamline future recruitment

Tech Lead   Sep 2020 – Apr 2021
- Led a team of 8 students to build a bill-splitting iOS app using **Swift**, **Node.js**, **MySQL**, and **Docker**

iOS Developer   Sep 2019 – Apr 2020
- Created an **iOS** app ⧉ to track grocery expiration and reduce food waste in Canada
- Transformed **Figma** wireframes into production **Swift** code in collaboration with **UI/UX** designers

UBC Symphony Orchestra ⧉   Sep 2018 – Apr 2019
Viola
- Successfully auditioned for UBC's top music ensemble and performed in 7 concerts over the school year

SKILLS

Languages *(C/C++, C#, Java, Python, JavaScript, Swift)* | **DevOps** *(Git, Docker, Kubernetes, AWS, GCP)*

Frontend *(Swift UIKit, HTML/CSS, React)* | **Backend** *(Node.js, .NET Core, MySQL, Firebase)*