

# JOSHUA LIN

(604)-671-0627 | [linynjoshua@gmail.com](mailto:linynjoshua@gmail.com) | <https://www.linkedin.com/in/linynjosh/> | <https://github.com/itsyongan>

## EDUCATION

### University of British Columbia

Expected: Apr 2025

BSc In Computer Science

- Relevant Courses: Software Engineering, Algorithms and Data Structures, Relational Databases, Applied Machine Learning

## EXPERIENCE

### Incoming Software Engineer Intern

Jan 2025 - Apr 2025

Amazon Robotics | C++, Go, Scala, Elasticsearch, Redis

Toronto, ON

- Implementing monitoring, metrics & reporting systems for observability and actionable alerting, from robot to cloud

### Software Engineer Intern

May 2024 - Present

Microsoft | WinRT, WinUI, C++, C#, XAML

Redmond, WA

- Integrated Bing Visual Search into the Windows Photos app, enabling **8+ million** monthly active users to search for related photos on Bing with a latency of just **500 milliseconds**
- Created the “Edit in Photos” shortcut in File Explorer, enabling users to quickly open and edit images in the Photos Editor via a right-click menu option, resulting in an increase of **10+ million** visits to the Photos App Editor per month.
- Implemented the “What’s New” feature using the **MVVM** architecture, delivering timely updates on the latest features to **500+ million** monthly active users of the Photos App

### Software Engineer Intern

May 2023 - Aug 2023

Amazon | Java, TypeScript, HTML, CSS

Vancouver, BC

- Developed and deployed a Java-based internal tool that retrieves and analyzes key buyer habits and past purchase interactions, enabling personalized product recommendations with a latency of under **150 milliseconds**
- Enhanced the core user experience for **2+ million** Amazon mobile app users by upgrading the Your Orders Carousel with dynamic visual showcases of buyers’ past interactions through A/B web experiments, resulting in a more engaging and personalized shopping experience

### Software Engineer Intern

Sept 2022 - Dec 2022

SAP | JavaScript, SQL, Kubernetes

Vancouver, BC

- Developed Grafana and Prometheus monitoring tools in Kubernetes clusters for internal SAP HANA tools, specifically the Asynchronous Task Service (ATS) and Distributed Job Manager (DJM), enhancing system observability and performance
- Optimized performance for ATS and DJM by dynamically adjusting cluster nodes and pod deployments, resulting in a **~10%** reduction in task execution time and a **~15%** decrease in timeout jobs

### Software Engineer Intern

May 2022 - Aug 2022

Google | Python, Django

Mountain View, CA (Remote)

- Developed and published a command-line tool conformance checker to **PyPI** to validate SPDX-formatted Software Bill of Materials (SBOM) against the National Telecommunications and Information Administration’s (NTIA) elements guidance as part of Google Summer of Code
- Deployed the NTIA Conformance Checker on [tools.spdx.org](https://tools.spdx.org), enabling **30,000+** monthly users to upload SBOMs and verify data completeness

### Teaching Assistant (Faculty of Computer Science)

May 2022 - Present

CPSC 310 Introduction to Software Engineering @ UBC | TypeScript

- Instructing fundamental software design principles: architectural design, object-oriented design, and design patterns

CPSC 210 Software Construction @ UBC | Java, Python, Docker, HTML

- Instructed students on fundamental OOP concepts, covering classes, objects, inheritance, and polymorphism

CPSC 110 Computation, Programs, and Programming @ UBC | Python, Docker, HTML

- Designed auto-graded functional programming questions using Python, HTML, and Docker

## OPEN SOURCE WORK

### [spdx/ntia-conformance-checker](https://tools.spdx.org)

The NTIA Conformance Checker checks for minimum elements that are “the essential pieces that support basic SBOM functionality and will serve as the foundation for an evolving approach to software transparency”

- Utilized existing SPDX libraries to parse and log errors while checking if the SBOM contains the minimum required data fields: supplier/component name, component version, unique identifiers, dependency relationships, author, and timestamps
- Created a command line tool that outputs machine-readable JSON containing the missing fields of an SBOM
- **Merged pull request:** Deployed the NTIA Conformance Checker API to [tools.spdx.org](https://tools.spdx.org) for **30,000+** monthly users

## TECHNICAL SKILLS

**Coding Languages:** C, C++, C#, Java, Python, JavaScript, TypeScript, HTML, CSS

**Frameworks and Libraries:** WinRT, WinUI, XAML, React, Redux, MySQL, SQL, SwiftUI, Spring, .NET, React, Django

**Developer Tools:** AWS, Azure, Docker, Git, Postman, Retool, Figma