T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

# **Edward Liang**

778-883-6139 | Richmond BC | edwardliangedli@gmail.com | edwardliang.com | github.com/edlng

# TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, TypeScript, HTML/CSS, R

Frameworks: React, Node.js, Flask, JUnit, Material-UI, Express

Developer Tools: Git, Docker, AWS, VS Code, Visual Studio, Vim, PyCharm, IntelliJ, Eclipse, Linux

Libraries: pandas, NumPy, Matplotlib, scikit-learn

## EXPERIENCE

# Software Engineer Intern

May 2023 - Sep 2023

Vancouver, BC

Pacific Laboratory for Artificial Intelligence

- Led the design of a serverless infrastructure in AWS, achieving a \$70,000 or 76% reduction in expenses
- Gained hands-on experience writing code with Python's boto3 to develop lambda functions, synchronizing AWS services like Route53, DynamoDB, EC2, and S3 to increase efficiency by 80%
- Worked with modern technologies like React and AWS CloudFront to develop the website plaicraft.ai and a virtual sandbox which modifies client and server Minecraft Java mods to enable immersive user gameplay with proximity chat built-in
- Collaborated with top machine learning researchers to optimize data collection processes for performance and scalability
- Introduced TLS and HTTPS certification for web browsers as well as lockdown using IP Tables and HTTP proxies, demonstrating a strong understanding of network security principles

# Junior Software Developer

Sep 2022 - Apr 2023

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Vancouver, BC

- Developed expertise in Big Data technologies such as Apache Hadoop, Hive, Impala, and Spark
- Contributed to the development of ODBC and JDBC SQL drivers using C++ and Java for multiple world-renowned tech giants
- $\bullet$  Created connectors that streamlined the linking of drivers with third-party apps like Tableau, resulting in an 83% increase in user productivity
- Versatile in working with UNIX/Linux, and Windows platforms, flexible with various operating systems
- Knowledgeable in various authentication mechanisms including SAML, SSL, Kerberos, and other industry-standard protocols, enabling secure connectivity for diverse systems and applications

## Projects

 $\textbf{Encore} \mid \textit{Node.js, HTML/CSS, Express, JavaScript, Git, Heroku, Spotify API}$ 

Jan 2022

- Worked with 3 other teammates to create a music guessing game website for nwHacks 2022
- Integrated Express to connect the Node.js backend with the vanilla JS frontend, illustrating capability in server-side programming and front-end development
- Leveraged calls to the Spotify API to retrieve data and utilized audio files to link with Wave.js to create an engaging waveform in the background for a better user experience

### AlgoVisuals | Python, Git, Tkinter

Oct 2021 – Dec 2021

- Using Python and Tkinter for the user interface, developed an all-inclusive algorithm visualizer tool for sorting and pathfinding algorithms
- Supports common sorts like merge sort, bubble sort, and also common pathfinding algorithms like Breadth-first Search and Depth-First Search

### EDUCATION

The University of British Columbia

Vancouver, BC