

Alexander William Wong

I am a full-stack software developer with experience in training and deploying production machine learning models. I aim to build end to end user facing features, creating scalable, intelligent, and robust systems.

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GitHub: github.com/awwong1
Location: Edmonton, AB, Canada

Work Experience

Staff Software Engineer

RLCore Technologies

Nov 2024 to May 2025

Edmonton, Alberta, Canada

Tech Stack: Python (PyTorch, FastAPI), TypeScript (Express, React), AWS (EC2, S3)

As RLCore's sole product engineer, I helped bridge the gap between the reinforcement learning scientists with engineering best practices, industrial plant ready applications, and tested/deployable code artifacts.

Notable Accomplishments:

W7

- (a) Standardized the configuration of our Python-based reinforcement learning (RL) industrial plant agents, enabling the team to focus on RL research and development.
- (b) Implemented a NodeJS web application for managing the RL agent's experiment hyperparameters, deployment, and communication protocol layer (OPC-UA) with the industrial plant's control system.
- (c) Established the CI/CD pipeline for the RL agent's build artifacts and deployment to the industrial plant's on-premises control systems using Github Workflows and Ansible.
- (d) Developed the internal documentation and training materials for the RL agent and Web client's configuration, development, and deployment processes.
- (e) Setup company cloud infrastructure on AWS, including EC2 instances, S3 storage, and Cloudflare Zero trust VPN for secure access to our various compute devices.

Senior Software Engineer

Block Inc., Square

Feb 2022 to Nov 2024

Remote

Tech Stack: JavaScript (Vue, Ember), PHP (Laravel), Ruby (Rails), Java, Kubernetes, AWS

I worked in Square Online's (SO) monetization team as the lead for our billing unification project, which began since Square acquired Weebly in 2018. Together, we consolidated the user facing onboarding, checkout, and subscription management experience for SO's plans with the rest of the broader Square ecosystem.

Notable Accomplishments:

W6

- (a) Lead the project for the migration of SO's billing and feature enablement service to Square's internal subscription management and billing services. Built the dashboards, alerts, on-call processes for the continual maintenance and support of the SO-to-SUB2 billing integration.
- (b) Transitioned the deprecated SqPaymentForm library to the maintained Square Web Payments SDK for SO's plan checkout flow. Created full regression test framework, metrics/observability dashboards, on-call processes and runbook documents to support this library change.
- (c) Maintained the legacy Weebly account migration process to Square's federated auth. Addressed identity/account unification edge cases including: existing/multiple Square accounts, mismatched email addresses between Weebly/Square, and unlinking an established Square/Weebly account.
- (d) Conducted dozens of technical screening, architecture, and past experience engineering interviews.

Senior Software Developer

Intuit

Jan 2021 to Feb 2022

Edmonton, Alberta, Canada

Tech Stack: JavaScript/TypeScript (React, Apollo, NodeJS), Java, Kafka, AWS (DynamoDB, S3, Lambda)

I was the scrum master within QuickBooks Online (QBO), building the platform supporting “First Time Use” (FTU) initial setup for user onboarding. We also instrumented internal rapid A/B test experimentation within the FTU to help coordinate new feature rollout and improve discovery of existing QBO functionality.

Notable Accomplishments:

W5

- (a) Integrated the visual snapshot testing framework AppliTools and Cypress regression test framework into our test suite to improve product confidence within one month of joining the company.
- (b) Onboarded FTU user and business attributes to data lake & ingestion pipeline using Apache Kafka. Coordinated consuming FTU data to downstream analysts and other QBO feature/mission teams.
- (c) Led the transition away from in-browser REST calls to the adoption of GraphQL through a serverless lambda function. Involved integrating with A/B testing framework, regression testing impacts on called downstream services, and orchestrating monitoring into our DevOps procedures.

Software Development Contractor

EPCOR Utilities Incorporated

Nov 2017 to Jul 2018

Edmonton, Alberta, Canada

W4 **Tech Stack:** C#, .Net, MSSQL, Bash, Microsoft Azure, Twilio

Nine month contract for DevOps team. Completed outstanding issues and deployed public facing Interactive Voice Response (IVR) integration with Schneider SCADA product for grid outage notifications.

Software Developer

Go Auto Corporate

Jan 2017 to Jun 2017

Edmonton, Alberta, Canada

W3 **Tech Stack:** TypeScript/Javascript (React, NodeJS), Python (Flask), MySQL, MongoDB, AWS, Docker

Built web applications for Go Auto dealerships across Canada for inventory, contract, and sales management. Built programmatic text and call features for interactive advertisements and user targeted sales.

Software Development Contractor

Telus Corporation

Mar 2016 to May 2017

Edmonton, Alberta, Canada

W2 **Tech Stack:** JavaScript (AngularJS), Java, Bash, NodeJS, Express, MongoDB, Splunk

Two six month contracts for OptikTV operations and internal networking teams. Built interactive dashboards for visualizing OptikTV health. Hardened internal services with authentication modules and SSL.

Software Developer Intern

Pason Systems Corporation

May 2014 to Aug 2015

Calgary, Alberta, Canada

W1 **Tech Stack:** Java, Python, Bash

Sixteen month specialization industrial internship requirement. Supported development work for oil and gas drilling technology. Contributed to measuring rig device usage to enable “pay per use” billing feature.

Education

M.Sc. Computing Science

University of Alberta; Supervisor: Dr. Abram Hindle

Sep 2018 to Jun 2021

Edmonton, Alberta, Canada

GPA: 4.0; Thesis: Multilabel Classification and Analysis of 12-Lead Electrocardiograms

B.Sc. w/ Specialization in Computing Science - Software Practice

University of Alberta

Sep 2010 to Jun 2016

Edmonton, Alberta, Canada

GPA: 3.6