

# Bill DuGe

billduge11@gmail.com | 780-660-8128  
billduge.com | github.com/bduge | linkedin.com/in/bill-duge

## EDUCATION

**University of Waterloo**  
BCS, COMPUTER SCIENCE  
CO-OP PROGRAM  
3.94 FACULTY GPA  
September 2018 - Present  
Waterloo, Ontario

### MOST RELEVANT COURSES

- Algorithms
- Object Oriented Software Development
- User Interfaces
- Data Structures and Data Management
- Operating Systems
- Database Management
- Logic and Computation

## SKILLS

### Languages

Python • JavaScript  
• TypeScript • C++ • C  
Java • Golang • CSS  
• HTML • SQL

### Technologies/Tools

Node.js • React • Redux  
• Django • Express • AWS  
Bootstrap • MongoDB  
• Kubernetes • Docker

## AWARDS

- UW Dean's Honours List
- High School Valedictorian (97% Average)
- UW President's Scholarship of Distinction
- UofTHacks (2019) Top 10 Project Award
- UW Cayley Math Contest Honour Roll (Top 0.8%)

## EXPERIENCE

**Wish** SOFTWARE ENGINEER INTERN | SAN FRANCISCO, CALIFORNIA  
January 2021 – April 2021 | Product Web Team

- Built buy-again feed to recommend products based on reorder probability data leading to an increase in company GMV, and implemented lazy loading on the order history page to improve buy-again loading times by 50%
- Developed a React scratch card and backend APIs to integrate with payment systems to distribute discount and cash incentives to improve customer retention
- Worked efficiently in scrum environment across teams to deliver product features for desktop and mobile clients using Python and TypeScript (React and Redux)

May 2020 – August 2020 | Logistics Team

- Created Python services to correct shipment data inconsistencies, identify store pickup performance, and optimize item packing for shipping, requiring complex and efficient SQL and MongoDB queries
- Developed APIs to provide merchants with product recommendations for different shipment fulfillment options to improve delivery speed and cost
- Improved the merchant dashboard by building new shipping fulfillment pages with React to create a modern user interface

**Youtreka Canada** SOFTWARE ENGINEER | REMOTE  
November 2019 – Dec 2020

- Designed and built a full stack application with Django and MySQL from the ground up, allowing employees to evaluate student applications on an end-to-end online platform, increasing the efficiency of application processing by 40%
- Oversaw site deployment, hosting, and maintenance processes to ensure a smooth roll-out to Youtreka employees
- Worked with organization executives as a technical consultant to identify key areas to improve through software solutions

**Connected** QA AUTOMATION DEVELOPER INTERN | TORONTO, ONTARIO  
May 2019 – August 2019

- Built a cross platform desktop application using Electron for testing Amazon Alexa voice applications, providing a framework to easily test different conversation flows and reduced time spent on writing tests by 30%
- Spearheaded development of a Python command line tool to automate submitting test suite results, reducing time spent on mobile QA testing by 40%

## PROJECTS

**Juke Jam** | EXPRESS, SOCKETIO, REACT, REDUX, SEMANTICUI, MONGODB  
juke-jam.com | github.com/bduge/juke-jam

- Web application to streamline how music is played with friends. Users can join private rooms and add songs to a shared queue to play on the host's device
- Built an Express server to: allow users to search songs and play songs using the Spotify API, authenticate accounts with the OAuth 2.0 protocol, and manage room data using a MongoDB database
- Used web sockets with SocketIO to develop client-side and server-side logic to sync client connections and events in real time