Bill DuGe

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EDUCATION

University of Waterloo Bachelor of Computer Science, 3.94 Faculty GPA   September 2018 - Present

Relevant Courses: Algorithms • Object Oriented Software Development • Data Structures • User Interfaces
Machine Learning • Artificial Intelligence • Database Management • Operating Systems • Computer Networks

SKILLS

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

Technologies Node.js • React • Redux • Django • Express • MongoDB • AWS • Bootstrap • jQuery
Kubernetes • Docker • UNIX • REST • GraphQL

EXPERIENCE

Wish Software Engineer Intern (Product Web) | San Francisco, California   January 2021 – April 2021

- 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 component and backend APIs to integrate with payment systems to distribute discount and cash incentives to improve customer retention through gamification
- Worked efficiently in scrum environment with other engineers, product managers, and designers to deliver product features for desktop and mobile clients using Python and TypeScript (React and Redux)

Wish Software Engineer Intern (Logistics) | San Francisco, California   May 2020 – August 2020

- 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

Youreka 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 platform, increasing application processing efficiency by 40%
- Oversaw site deployment, hosting, and maintenance processes to ensure a smooth roll-out to Youreka employees
- Worked with executives as a technical consultant to identify keys 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, 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. Users can vote to influence which songs are played.
- 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 fullstack logic to sync client connections and events in real time

Photo Spot | Golang, MongoDB, Bootstrap, Gorilla Sessions   github.com/bduge/photo-spot

- Web application to host photo competitions. Users can easily create photo competitions, submit photos, or vote for entries in other competitions
- Built full authentication system using Gorilla sessions to allow users to create and log into their account
- Developed logic to store image files in the server's file system for efficient retrieval