JACK PAN

3A COMPUTER SCIENCE

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EXPERIENCE

Wish

Full Stack Engineer, Payments Team

Jan - Apr 2020

- Built a feature to forgive banned users based on interactions with Wish ads, resulting in gross merchandise value **increasing by \$30K per week**
- Implemented a process for retrying failed customer payments, with an annual projected recovery of **\$45M**
- Developed a novel system to centralize storage of over **50 million** customer payment details while adding no latency to the user experience
- Engineered features, experiments, and bugfixes server-side in Python using Tornado and client-side in Javascript with React, with a focus on reducing buyer risk and improving checkout experience

D₂L

Software Developer

May - Aug 2019

- Improved NLP algorithm for generating quiz questions from text, increasing yield of acceptable questions by **~60%**
- Implemented major features for an in-browser free-hand PDF editor using React with Redux in TypeScript
- Built crucial backend functionality for users to add, edit, and save their uploaded documents following RESTful design using Express and NodeJS

DragonAgile

Software Developer

May - Aug 2018

- Developed a full-stack web app to manage user permissions for the version control software Perforce using React, Node.js, and Java
- Designed and built various plugins for Jira and Confluence using **Java**

PROJECTS

UWClasswatch

React, Node.js, Express, MongoDB, Mongoose

- Web app for UW students with **1500+ users** and highly positive feedback
- Scrapes online class registries to notify users when a class they are "watching" has a spot open for enrolment

Ceci

Python

- Interpreter for a programming language with novel features of my own design
- Composed of a context-free grammar, a lexer, an LL(1) parser, and an evaluator all designed and built from scratch

SKILLS

Languages:

Python

JavaScript/Typescript

C++

SQL

Frameworks & Tools:

Flask

Tornado

NodelS

Express

React

Redux

MongoDB

Mongoose

Docker

AWARDS

PennApps Award Winner

2019

Best AR/VR Project

Hack the 6ix Finalist

2018

Top 10 of 65 teams

Dean's Honour's List

Terms 2A, 2B, 3A 87%+ term average

UW Scholarship of Distinction

2017

95%+ admissions average

EDUCATION

University of Waterloo

Bachelor of Computer Science, 2017-2022 3.94/4.0 GPA