Jake Xia

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SKILLS

LANGUAGES
Javascript, C++/C/Java, Python, Swift, SQL, HTML5/CSS, Bash

TECHNOLOGIES
- Node.js / Express / Koa
- PostgreSQL / MongoDB / Firebase
- Pandas / NumPy / MATLAB
- React + Redux / Vue
- Docker / Kubernetes / Helm
- Xcode / SwiftUI / CoreData / ARKit
- AWS / Google Cloud
- AutoCAD / SolidWorks / Shapr3D
- Laser Cutting / 3D Printing

EDUCATION

University of Waterloo
Candidate for B.ASc, Mechatronics
Fall 2018 — Spring 2023
GPA: 3.7

RELEVANT COURSES
- Algorithms and Data Structures
- Sensors and Instrumentation
- Computer Structure / Operating Systems
- Numerical Methods

INTERESTS

Robotics, 3D Modelling, Preventing Climate Change, Product Design, Indoor Gardening, Photography

AWARDS

Ontario Volunteer Service Award (2018), Young Photographer of the Year Top 5 out of 754 photographers (2019)

EXPERIENCE

SOFTWARE ENGINEER @ Clearbanc
Toronto, ON | January 2020 — April 2020

- Engineered 4 RabbitMQ import processes that collect 100K+ daily transactions for Clearbanc's core data pipeline via API integrations with Authorize.Net, Apple AppStore, Google Play, and BigCommerce
- Launched tagging tool to increase visibility on hostile and COVID-affected businesses, preventing thousands in funding from being issued mistakenly
- Automated the tagging of 252 COVID-affected businesses using a PostgreSQL migration, saving 80+ hours of overhead
- Converted a spreadsheet into a funding plan tracking tool integrated with Clearbanc's database and Salesforce, streamlining data interactions for the data science team

FULLSTACK DEVELOPER + COFOUNDER @ DineHere
Toronto, ON | August 2020 — Current

- Launched *DineHere.me* a web service built with Koa, AWS, MongoDB, Passport, React Redux, Heroku and Netlify for restaurants to generate digital menus from just a photo. The QR code menu is contactless and thus prevents virus spread
- Reduced menu loading time 100x measured via network request time by optimizing MongoDB indexes and intelligent caching, improving the user experience and customer retention

WEB DEVELOPER @ University Health Network
Toronto, ON | May 2019 — August 2019

- Led a design team to create a bespoke front-end web framework and component library accessible by a content delivery network. Currently being adopted by all UHN research facilities
- Modernized information architecture and UI/UX by rebuilding 6 core websites from scratch using HTML5, CSS, and JavaScript
- Prototyped a firebase web-app that improves waiting rooms by giving patients realtime updates about their journey in the queue with live wait-time calculations

PROJECTS

FOOD CENTRIC SOCIAL PLATFORM MongoDB/Node.JS/React

- Developed a recommendation algorithm to help users find posts they might enjoy based on posts they've previously interacted with. Instagram style app but for sharing food pictures / recipes during quarantine

CALORIC JOURNAL SwiftUI/CoreData

- iOS App built to explore declarative SwiftUI, designed to quickly track caloric intake, ingredients, nutritional information, and quantities of food

EXPENSE MANAGING FOR WEB + iOS Firebase/Swift

- Cloud app that allows users to analyzes spending habits. Shows tendencies, breakdowns, and insights through an intuitive dashboard