

TIGER OAKES

Software Developer with 7 years of experience in functional and object-oriented programming. Proven success creating custom solutions for a variety of businesses.

contact@tigeroakes.com

tigeroakes.com

Vancouver, BC

github.com/NotWoods

Education

09/2015 - 05/2020

(expected with co-op)

University of British Columbia

Bachelor of Science in Computer Science, 3rd year

Work Experience

05/2018 - 07/2018

storage.googleapis.com/chrome-supersize/index.html

Google

Chrome for Android - Software Engineering Intern

- Redesigned & added new features to "Super Size", **Python** tool with **web output** used to analyze millions of files contributing to Chrome's size. Tool saved 30 KB in the first week after release.
- Utilized **streams** and **worker threads** to handle 180 MB of data at once. Displayed partial data in 1 second, full data in 7 seconds.
- Updated **Android** bytecode compiler, shrunk Chrome by 29 KB.
- Wrote **Java** bytecode rewriter to insert code automatically.

01/2018 - 04/2018

vitalmechanics.com

Vital Mechanics

3D Graphics & Simulation Developer Intern

Simulates skin for visual effects and prototyping clothing

- Built **TypeScript Electron** client that interfaces with **C++** server to display real-time 3D simulations using **WebGL**.
- Migrated large program from **jQuery** to **React** and **Redux**, saving time and effort for future programmers through reactive design.

08/2017 - 12/2017

yelp.com/describe_your_project?category=movers

Yelp

Local Services - Software Engineer Intern

- Built "Describe Your Project" package with **Python**, so users to easily request quotes from home services businesses.
- Developed **Python** package to encapsulate API with RST docs.
- Implemented UI for branching question flows with **Flow**, **React** and **Redux**; wrote tree structure to track questions to ask users.
- Led hackathon team to build new product for in-restaurant experience. Placed in **Top 3 of Hardcore** category out of 44 projects and was picked up by sales team afterwards.

05/2016 - 04/2017

github.com/ubc-farm

Centre for Sustainable Food Systems at UBC Farm

Software Developer

- Developed custom **TypeScript** software with the **UBC Work Learn International Undergraduate Research Award**.
- Wrote fill algorithm to classify sections of farm fields.

10/2009 - 08/2015

omlhawaii.com

Oakes Management LLC

Web Developer and IT Manager

#1 custom home builder in Hawai'i, building private resort residences.

- Designed and developed web portfolio to showcase residences.
- Applied GPU-accelerated parallax using CSS 3D transformations.

Skills

TypeScript | JavaScript | Python | Kotlin | Java | C# | Android | Node.js | React | Design

Awards

- Finalist: nwHacks 2018 (out of 800+)
- Hardcore Top 3: Yelp Hackathon 24.0 (out of 44)
- UBC Work Learn International Undergraduate Research Award
- Grand Prize: Congressional App Challenge 2014, Hawaii's 2nd Congressional District

Selected Projects

05/2014 - 05/2015

Big Island Buses

Web app to replace Hawai'i paper bus schedules

- Won **Grand Prize in Congressional App Challenge 2014, Hawaii's 2nd District**.
- Optimized site for mobile **offline** viewing.
- Contacted and worked with the **County of Hawai'i** to integrate the app with the island's bus system.

02/2018 - 01/2019

Soil TopARgraphy

Teaches soil topography through AR

- Will be **published on Google Play** in 2019.
- Programmed **Android AR** viewer in **Unity** with **C#**, exposed fields to inspector so teammates could quickly manipulate views.
- Wrote script to process Mapbox heightmaps to generate Blender 3D model.

01/2018

μzm

Enhances museum immersion with gamification

- Finalist, nwHacks 2018** out of 800+ people.
- Helped write **Android** app in **Java** to scan NFC badges on exhibits and patrons.
- Built backend with **Node.js/MongoDB**.

04/2018 - 08/2018

Color Breakdown

Design tool to analyze image color palette

- Published **Progressive Web App** on **Microsoft Store**.
- Used **JavaScript** file API to open images for parsing, clipboard API to copy hex values.
- Stored user data in **IndexedDB**, used cursors to stream out saved data and reduce time to display by 1 second.