Justin Barca

About Me

Versatile full-stack web developer specializing in front-end frameworks, administrative user interfaces, and graphically-oriented JavaScript applications (SVG vector graphics, 3D web applications)

Contact Information

Location: Kitchener, ON

Skills & Expertise

★★★ Accustomed

Javascript, Typescript, React, a11y, i18n, SVG, Material-UI, HTML, CSS, custom elements, mobx + mobx-state-tree, Karma, Mocha, Gitlab CI/CD

++ Familiar

node.js, VueJS, three.js, EmberJS, Redux, Backbone.js, jQuery

Acquainted

Python, Flask, Blender, Docker, AngularJS (1x), Angular

Professional Experience

React Developer at Venuiti Healthcare Inc.

The details of this position can not be published due to an NDA

Software Engineer II at Super.com

Supported the development of SuperTravel, adding features, fixing bugs, facilitating A/B tests, authoring automated tests, and refining page content. Stack: React.js, Redux.js, Material-UI, Jest, Webpack.

Senior Software Developer at Camis Inc.

- Principle developer of Sidekick, a mobile React PWA supporting the monitoring and enforcement of public parks' access, leveraging redux, GraphQL, jest, storybook and Material UI
- Supported the maintenance and refinement of Angular application that supports booking of campsites across North America

Front-End Engineer at Points

- · Maintained legacy (1x Angular) white-label storefront framework
- Supported the prototyping and development of an entity-component framework for building customized online storefronts using React and WC3 custom elements
- Authored and updated extensive unit/integration/e2e tests (Karma, Mocha, Selenium)
- Worked within rigorous procedures for resource deployment, at times monitoring and debugging production issues
- Played an engaged role in a variety of agile procedures (Scrum, Kanban)

Web Developer at G Adventures

- March 2017—May 2017
- Contributed to the development of internal tools for managing complex data structures that coordinate a vast array of worldwide group tourism trips using webpack, ReactJS, Redux, react-sagas, and redux-forms
- Tested components and their integration using enzyme + Jest

Web Developer (permanent) at Kiwi Wearables

- November 2015—February 2017
- Refactored, debugged and improved a dashboard application (React + reflux + webpack) for the maintenance of users, companies, and applications that the company serviced through its B2B API service
- Enabled real-time analysis, recording, and editing of accelerometer/gyroscope sensor data
- Maintained a RESTful API (node.js + express.js) for the purposes of persisting data associated with app providers, their subscribers, and the motion data they maintain
- Constructed client-facing REST API (node.js + express.js) to facilitate activity tracking analysis on submitted data
- Built web tools using Backbone.js to support the creation and maintenance of motion data variants for use in Al training
- Sole developer of Pepper.ai, a Messenger API chatbot whose aim was to promote physical and emotional well-being through mood, sleep, and activity tracking

Web Developer at Extreme Measures

- Implemented an internal system of document generation and editing which transformed data about clients and their floor plan assets into professional floor plan booklet deliverables
- Built repositionable and resizable components to present SVG documents, allowing the user to change the zoom or alter clip paths applied to the images with SnapSVG
- Incorporated a CSS theme editor which allowed inline modification of an SVG region's styles
- Managed complex data hierarchy and application state, modeling book templates, books, pages, style themes, document regions, and spatial transformations using EmberJS with Ember Data
- · Developed a service for generating PDFs from a given book using CasperJS

Web Developer (contract) at Kiwi Wearables

- Created a developer tools portal that enabled developers to record, detect, and store wearable technology gestures using Javascript, Node.js, Backbone.js
- Created a bluetooth-enabled Chrome App that displayed the orientation of a sensor device in 3D using three.js along with real-time graphs and dials

Achievements

B. Sc. - Software Engineering

Carleton University

completed 3 of 4 year program

Learned fundamentals of object-oriented and functional programming, in Java, C / C++, perl, scheme

Hobbies & Interests

Digital Maker/Inventor as Playful Geometer

(2008 - present)

- Invented a line of continually evolving flat-pack polyhedral lanterns
- Wrote python scripts to to generate SVG nets from shape-based templates + per-shape collection of face images (legacy)
- Designed packaging and instructions for all products using SVG scripting + Inkscape
- Established e-commerce site and maintained social media platforms to promote products (retired)
- Created captivating art installation experiences at many festivals and special events
- Developed an app enabling users to interactively design and build custom-skinned 3D models (on <u>github</u> with accompanying <u>web demo</u>) using the following stack: Typescript, React, mobx-state-tree, Electron, Material UI, Github Actions