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# Mike Belanger

- Five years of professional development experience.
- Familiar with React with Typescript.
- Experience with Leaflet and OpenLayers.
- Some experience in backend technologies such as Ruby on Rails.
- Background in Cognitive Science and Computer Animation.

Proficient	Familiar
<ul style="list-style-type: none"><li>• Javascript, HTML, CSS.</li><li>• Typescript.</li><li>• React.js.</li><li>• Ruby (Ruby on Rails).</li><li>• Git.</li><li>• MacOSX, Ubuntu Linux.</li></ul>	<ul style="list-style-type: none"><li>• Agile Methodologies.</li><li>• React Native.</li><li>• SQL (PostgreSQL).</li><li>• jQuery, Angular.js.</li><li>• CSS, Bootstrap.</li><li>• Docker.</li><li>• Inkscape, Blender, Krita, Gimp.</li></ul>

## Work Experience

### **Developer**

*IMRSV Data Labs Inc. - January 2021 - Present*

#### **Typescript, Javascript, React, Python**

- Created various frontend interfaces in React.js.
- Implemented map interfaces with Leaflet and OpenLayers.
- Significant experience prototyping early-stage user interfaces.
- Worked primarily in an Agile methodology.
- Added to existing interfaces for a React Native mobile application. This application helped retail workers manage customers.
- Used libraries such as Leaflet.js to create map visualizations.
- Worked with server-side technologies in both Python and Node.js.

## **Junior Developer**

*Weather Telematics Inc. - July 2017 to November 2017, and October 2018 - March 2020*

### **Python, Scala, Apache Spark, Javascript, Material Design, Typescript, Angular, GIS (Leaflet.js, QGIS).**

- Analyzed weather and traffic data using Apache Spark, a big data processing and analytic engine using both Python and Scala scripts which would allow drivers to receive real time notifications if a specific set of conditions were met.
- Used QGIS to segment specific Autobahn routes into GPS points that were all 200 meters apart. These points ultimately determined where road weather conditions would be modelled. This modelling was done for Daimler AG.
- Implemented additional functionality for Weather Telematics' web portal. The portal was a Single Page Application (SPA) built using Angular.js which showcased weather predictions and road conditions on a map using the Leaflet.js display library.

## **Junior Developer**

*Fluent Solutions Inc. - November 2017 - October 2018*

### **Ruby on Rails, Typescript, Angular.js, Coffeescript.**

- Developed and improved websites running Ruby on Rails, Bootstrap, Material Design, and Angular.js. Implemented business logic that met the required usage cases using a TDD approach.
- Wrote front-end code with Javascript, Typescript and occasionally Coffeescript.
- Designed UI mockup work using Inkscape and Pixelmator.

## **Workshop Facilitator**

*theSpace, Ottawa ON - June 2017 - March 2020*

- Taught Graphics Design Workshops using Blender, Krita, Goxel and MagicaVoxel as well as other open-source tools.
- Created learning material and adapted my workshops for young adults diagnosed with mental disabilities.

## **Marketing Researcher**

*CPA Plus, Ottawa ON - June 2016 - June 2017*

- Researched for prospective clients for CPA's bookkeeping business. These clients were small businesses that specialized in paving, food services, masonry, and landscaping.
- Wrote advertisements and video scripts.
- Authored promotional scripts and prospective client research using Google Docs.

## **Filing Administrator**

*MD Financial, Ottawa ON - August 2014 - September 2015*

- Proposed, and authored a Python-based scripting system for the automation of document sorting.

- Used Python to check for inconsistencies within existing filing systems.

## **Education**

### ***Bachelor of Cognitive Science***

*Carleton University, Ottawa, ON, 2010 - 2014*

- Co-authored a peer-reviewed journal publication.
- Implemented an attentional model (Emergic Network Architecture) for an AI system using Python.
- Established a revision control system (git) for the AI model's codebase.
- Documented various wiki articles regarding the AI model.

### ***Ontario College Advanced Diploma - Animation***

*Algonquin College, Ottawa, ON, 2004-2007*

- Worked with Alias Wavefront Maya, Adobe Photoshop, and Apple Final Cut Pro.
- Developed an understanding of polygonal modelling with Blender.

## **Certificates**

### ***The Nature of Code***

*Kadenze, May 2016 - July 2016*

- Learned p5.js, a Javascript data visualization and multimedia library, and how it can be used to simulate various natural processes.
- Gained an understanding of vector mathematics and how it's applied to moving objects and forces.
- Became familiar with creature navigating strategies, such as the Boid behavioural model.
- Got introduced to genetic concepts and their application in creating creature variation, selection and heredity.
- Looked at fractals, and how to implement them using recursion.

### ***Systematic Program Design***

*EdX, June 2015 - July 2015*

- Learned software design using a hands-on approach.
- Used functional programming with the Racket programming language.
- Learned about test driven software development and how to properly document code.

### ***An Introduction to Interactive Programming in Python***

*Coursera, June 2015 - July 2015*

- Improved my Python coding skills.

- Got exposure to the Codeskulptor environment.

### **Introduction to HTML5**

*EdX, June 2015 - July 2015*

- Learned about W3C standards, and latest features of CSS3 and HTML5.

## **Volunteering**

### **Wiki Software Contributor**

*The Blender Foundation, wiki.blender.org - 2008 - 2012*

- Edited and categorized 3D software documentation.
- Documented the latest features of Blender software program, a 3D graphics application.

### **Free Geek Vancouver**

*Free Geek, Vancouver, 2008-2009*

- Disassembled old computer parts for recycling. Helped sort other parts to be used in new computer systems.