

**Riley Draward**  
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<https://github.com/rdraward>  
<https://rdraward.github.io/personal-website-simple/>

## Skills

**Languages:** Java, C/C++, JavaScript (ES5 & ES6), HTML & CSS, Python, C#

**Frameworks:** ReactJS, mobx, Jest, Node.js, JQuery, Bootstrap, Underscore.js, Backbone.js, RequireJS, Swagger, doT.js, JUnit, QUnit, Chai, Intern, Spring, Pyramid

**Software & OS:** YourKit profiler, Maven, Jenkins, RTC, GitHub, ElasticSearch, KVM Hypervisor, IBM BlueMix, Amazon EC2, Windows and Linux environments, some iOS and Android experience

**Databases:** SQL, MongoDB, MySQL

**Other relevant skills:** Data analytics, big data solutions, object oriented design, agile and scrum, unit and functional testing, designing scalable solutions, human-computer interaction

## Soft Skills:

- Thrive working in both team and individual environments leading to the successful delivery of products and projects.
- Experience in giving formal and impromptu demos and presentations to both software development teams and company executives.
- Excellent oral and written communication skills; I have written an article for the University of Manitoba newspaper, The Manitoban, which can be read here:  
<http://www.themanitoban.com/2011/11/sell-yourself-professionally-digitally/2716/>

## Work Experience

- **IBM - Watson Analytics Smarts, RAVE, Cognos Analytics Modelling UI** Ottawa, ON  
*Staff Software Developer (Full-stack)* *July 2014 - Present*
  - Performance testing using YourKit and improvement in both JavaScript and Java implementations of RAVE; performance of map bundle improved 2x and matched D3 performance in JavaScript.
  - Developed a learning/recommendation system using Java and ElasticSearch that automatically preforms actions for the user based on prior preferences and use patterns.
  - Lead developer on Watson Analytics SSO server that uses the Oauth2 protocol to connect to IBM Dataworks data preparation tool.
  - Selected to help the Cognos Modelling UI team along with 2 senior developers and adopt a new tech stack: ReactJS, mobx, SCSS, ES6 and Jest. Promoted to Staff Software Developer in November 2016.
- **IBM - Extreme Blue** Markham, ON  
*Technical Intern (Work Term 3)* *May 2013 - September 2013*
  - Project Title: Exploiting Direct-Attached Flash to Improve Price Performance of High-Density Cloud Servers - worked with Linux kernel and KVM Hypervisor to try and improve swap speed via parallel processing to leverage flash storage as a low-cost alternative to memory on a server.
  - Built the prototype solution, developed a business case for said prototype and presented our project and business strategy to IBM executives, including CEO Ginny Rometty.
- **Electronic Arts - Global Online Services - Tools Team** Burnaby, BC  
*Associate Software Engineer (Work Term 2)* *September 2012 - December 2012*
  - Built a server configuration tool allowing for quick editing of server config files on intranet portal site using Java and the Spring framework.

- **Thinkbox Software** Winnipeg, MB  
*2D/3D Software Developer (Work Term 1)* *January 2012 - April 2012*
  - Added support for multi-channel exr files, as well as Z-depth and normal buffers into Krakatoa SR.
  - Debugged and fixed the frame-buffer used in render previews of Krakatoa.
  - Rewrote Draft compositing libraries to improve performance and added ability to add or remove audio from a series of composited frames using C++ and Python.
- **University of Manitoba - Human-Computer Interaction Lab** Winnipeg, MB  
*Research Assistant* *May 2011 - December 2011*
  - Assisted with adaptableGIMP project by prototyping the interface and developing the algorithms for the recommender system using Vala.

## Projects

- **Craft Breweries of Ottawa/Gatineau**  
<https://rdraward.github.io/ottawa-craft-beer-map/>
  - Used the Google Maps API to plot out the craft breweries in the Ottawa/Gatineau region.
  - Display breweries with logos as markers, display contact info, hours of operation and my personal recommendation.
- **Manage My Restaurant iOS and Web App**  
<https://github.com/umdrawa2/4350Proj>
  - Successful final year Computer Science project.
  - Work as a team to design and develop a web application, with a surprise addition of an iOS app added a few weeks before the project deadline.
  - Unit and functional tests are included. Project was hosted using Amazon's EC2.
  - Decided to use Python Pyramid framework for server, Bootstrap for the web front-end. Gained some experience in iOS and Objective-C programming, along with Selenium testing.

## Volunteering and Extracurriculars

- **IBM - nextWave** Ottawa, ON  
*Co-Chair* *June 2015 - Present*
  - Helped to run the group for new hires to create a sense of community within the lab.
  - Organize and run fun events for the entire IBM Ottawa lab, including screening of Star Wars: The Force Awakens, bringing in food trucks and throwing an end of year holiday social.
- **IBM - Technical Vitality Team - TechChallenge** Ottawa, ON  
*Co-Chair* *September 2015 - Present*
  - Organize and run hackathons and tech challenges for the IBM Ottawa lab.
  - Recent challenges included using Watson APIs and the Weather Company API on Bluemix.
  - Community hackathons used to develop prototypes for local charity and non-profit organizations.

## Education

- **University of Manitoba** Winnipeg, MB  
*Bachelor of Computer Science (Honors)* *2009 - 2014*
  - Minor in Management from the Asper School of Business
  - Dean's Honor List

**References: Available upon request**