

# KEVIN CHEN

## SKILLS SUMMARY

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Waterloo Computer Science  
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<b>Languages</b>	Python, Ruby, Perl, C, C++, Java, JavaScript (Angular, React, Backbone, Ember), PHP, HTML, CSS, XML, JSON, SQL
<b>Tools</b>	RESTful Services, jQuery, Rails, Elasticsearch, AJAX, SASS, version control management (Git, Mercurial, SVN), bug tracking software (Bugzilla, JIRA), Bioinformatics suites (BioPerl, BioPython, Galaxy)

## WORK EXPERIENCE

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### Freshbooks

January – May 2018

#### Software Engineer

- Developed multiple new components, models and routes for frontend ember.js application
- Designed new endpoints in backend services written in Ruby on Rails and Python, fetching from MYSQL databases
- Implemented new trial user workflow to improve trial-to-paid conversion, later mainlined to all new users
- Participated in agile methodologies including sprints, retrospectives, test-driven development and code reviews
- Wrote unit and integration tests for both frontend and backend services as well as automation tests with Selenium

### AlertDriving

May – September 2017

#### Software Engineer

- Created new single page web application components using MVC JavaScript frameworks AngularJS and Backbone.js
- Wrote server-side backend microservices for PHP-based Zend Framework, working with client databases (MySQL)
- Improved existing product by resolving over 50 bugs including refactors, efficiency improvements and compatibility fixes
- Set up and debugged multiple reusable development environments using Linux & Windows virtual machines

### Ontario Institute for Cancer Research

May – September 2015

#### Bioinformatics Specialist

- Organized and prepared for International Cancer Genome Consortium data releases, including over 80 cancer projects
- Wrote Python script suite to improve data quality and correctness, correcting over 25% of raw data
- Generated numerous detailed heat maps and graphs with R to visually track individual project completeness
- Designed and executed data management tasks, ensuring multiple error-free data releases

### Agriculture and Agri-Food Canada

2014

#### Bioinformatics Software Developer

##### Fall 2014

- Developed for open source web-based scientific workflow platform “Galaxy”
- Wrapped command line Bioinformatics software packages into Galaxy, including over 100 “MOTHUR” commands
- Implemented necessary Galaxy functions and enhancements in Python and XML
- Configured Linux virtual machines, using Vagrant to quickly create isolated testing environments

##### Winter 2014

- Rebuilt a DNA Nucleotide processing pipeline from multiple BASH scripts into a standalone Perl program
- Implemented multi-threaded processes into the pipeline, improving runtime by over 50%
- Developed various tools and scripts to process biological research data in Perl and BASH

### HSM International

August – December 2013

#### Web Developer

- Designed website logos, images and banners
- Independently created new pages meeting client specifications, while ensuring consistency throughout site

## EDUCATION

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### Bachelor of Computer Science

- Co-operative Program – University of Waterloo, 2013-2018