KEVIN CHEN

4A Computer Science
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SKILLS SUMMARY

Languages	Python, Perl, Bash, C, C++, Java, JavaScript, PHP, HTML, CSS, XML, JSON, SQL, MATLAB, R
Tools	Linux/Unix, Windows, Zend Framework, RESTful Services, JavaScript Frameworks (Angular, Backbone, Ember, Require), jQuery, AJAX, Sass, Git, Mercurial, SVN, VMware, Bugzilla, JIRA, Bioinformatics suites (BioPerl, BioPython, Galaxy)

WORK EXPERIENCE

AlertDriving *2017*
Software Engineer
- Developed frontend and backend features for global web based fleet management and training application
- Created new single page web applications 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 *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
- Managed GitHub repositories for several tool suites, preforming merges with several branches
- 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%
- Translated and reorganized bioinformatics tools and procedures into clean Perl scripts based on BioPerl
- Developed various tools and scripts to process biological research data in Perl and BASH

HSM International *2013*
Web Developer
- Designed website logos, images and banners
- Used Adobe Suite to create new website elements and assets, working with HTML and CSS
- Independently created new pages meeting client specifications, while ensuring consistency throughout site

PROJECTS

Skyfish (In Development)
- Isometric tile-based SRPG using HTML5/JavaScript open source game framework Phaser
- Implemented enemy AI, pathfinding algorithms and object-oriented unit interactions
Personal Website (k66chen.com)
- Built clean personal site hosting projects and information using HTML5, JavaScript and CSS utilizing Bootstrap