KEVIN CHEN

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SKILLS SUMMARY

Languages

Python, Perl, Bash, C, C++, Java, XML, JSON, SQL, MATLAB, R, HTML, CSS

Tools

Linux/Unix, Git, Mercurial, SVN, Vagrant, VMware, Bugzilla, Bioinformatics suites (BioPerl, BioPython, Galaxy, mothur), Cheetah Template, Adobe Flash/Dreamweaver

WORK EXPERIENCE

Ontario Institute for Cancer Research

2015

Bioinformatics Specialist

- Operated in the Data Coordination Centre Biocuration team, responsible for the data collection and validation of cancer projects from around the world
- Organized and prepared for Cancer Genome data releases including 70+ cancer projects
- Developed Python scripts to improve data quality and correctness
- Generated numerous heat maps and graphs with R to track individual project completeness
- Designed and executed data management tasks on large amounts of XML, JSON and TSV files

Agriculture and Agri-Food Canada

2014

Bioinformatics Software Developer

Fall 2014

- Developed for 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
- Implemented necessary Galaxy functions with Python, XML and Cheetah Template
- Resolved large amount of new and existing bugs related to Galaxy
- Configured Linux virtual machines, using Vagrant to quickly create test environments

Winter 2014

- Rebuilt the Automated Oligo Design 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 BASH scripts into clean Perl scripts
- Developed various tools and scripts to process biological data in Perl and BASH
- Experience with multiple Bioinformatics file formats, data and tools

HSM International 2013

Web Developer

- Designed website logos, images and banners
- Built new features, ensuring consistency throughout the site
- Used Adobe Suite tools on many website elements, while working with HTML and CSS

PROJECTS

- Sidescroller in PyGame that utilizes basic Model-View-Controller principles
- Contributions and fixes to OpenKore open source Perl/Python-based bot
- Automated Oligo Design Pipeline Perl pipeline used to process biological sequences