

WORK ETHIC

A reliable self-starter and quick learner who is always pursuing new skills and striving to exceed expectations. Well-developed interpersonal speech and written communication skills, particularly in correspondence with project clients and users. Demonstrated proficiency in problem detection, analysis, and resolution. Fully adaptable to rapidly changing technical environments.

TECHNICAL SKILLS

My programming background mirrors the high variance in technical environments of past employment and educational experiences. Skills required included the use (and sometimes implementation) of:

Scripting Languages	OOP Languages	Web Development (Front-end)	Web Development (Server-side):		Proprietary	Revision Control
			Server Config + Frameworks	Server Databases		
Python	C++	HTML5	Perl + Catalyst MVC	MySQL	BSI's PEAKS	Git
Perl	Java	CSS3	Python + Django	AceDB	SmartBear's	SVN
Bash scripting	(with Eclipse	JavaScript	LAMP Stack	CouchDB	TestComplete	CVS
JScript	Android SDK)			(Doc NoSQL)		

EDUCATION

Candidate for Bachelor of Computer Science, Bioinformatics Option, 2008 - present
University of Waterloo, Waterloo, Ontario, Canada

WORK EXPERIENCE

Bioinformatics Research Student

The Hospital For Sick Children, Toronto ON, Sep - Dec 2012

Contributed to a variety of research projects focusing on various aspects and impacts of chromatin modification. Projects varied from web development and testing to data mining and analysis.

- ∞ Used Perl and Bash scripts to mine TF & disease data. Retrieved, combined, filtered, and subsequently analysed the data from numerous on-line DBs to identify statistically-significant trends.
- ∞ Testing and maintenance of the **Disease-ANnotated Chromatin Epigenetics Resource**. Facilitated the discovery and ratification of potential causes of various crash-inducing circumstances and data integrity issues.

Bioinformatics Software Developer

Ontario Institute for Cancer Research, Toronto ON, Jan - Apr 2012

Primary focus was to contribute to the development and maintenance of the **WormBase** on-line resource. Tasks primarily involved implementing and maintaining features based on communication with project members, clients, and users.

- ∞ Used Perl with the Catalyst MVC framework to contribute to the release of **WormBase 2.0**.
- ∞ Integrated third-party tools such as Cytoscape Web and BLAST to provide supplementary information about data such as proteins.
- ∞ Created "Getting Started" and development work-flow documentation to ease transition for new developers.

Software Test Engineer

Bioinformatics Solutions Inc., Waterloo, Ontario, Jan 2010 - Aug 2011

Started as one of the first two test engineers at BSI with only a copy of the main product to be tested. Researched, created a proposal for, and subsequently implemented the testing work-flow (from the automated testing framework and development of the appropriate test scripts to the revision control system). Trained and managed new programmers and also prepared extensive documentation in later terms.

- ∞ Primary responsibilities were to ensure the stability and correct function of PEAKS, Proteomics software for tandem mass spectrometry (Peptide sequencing and Protein ID)
- ∞ Developed and maintained test cases using JScript and shell scripts for validation of key features between software updates.
- ∞ Also responsible for testing work-flow analysis and recommending improvements
- ∞ Researched, proposed, and implemented changes to the revision control system from CVS to SVN to eliminate related issues and facilitate integration with TestComplete
- ∞ Trained new testers on software tools and work-flow procedures, and documented these to facilitate the training process

PROJECTS OVERVIEW

Xawaash Somali Food Blog (Website)

[Xawaash.com](http://xawaash.com) is a multilingual food blog focusing primarily on (but not limited to) simplified Somali food recipes. The website uses the WordPress blog engine and was originally updated using just the basic visual editor of the Headway Themes.

- ∞ Added jQuery tabbing system for dividing and displaying varying languages
 - ⊙ This replaced the original system of simply displaying each section of content in each language alternating inline
 - ⊙ Implemented to simplify the addition of future languages
 - ⊙ Planned: modify tabs to load content via AJAX when selected OR implementing language sub-domains
- ∞ Social media integration through the use of various plugins and APIs
- ∞ Implemented script for generating HTML content of new posts using corresponding recipe components in a database
- ∞ Created ingredient "dictionary" database allowing for simplified conversion between languages as well as association with images and links (Planned: display in tooltip when hovering over ingredient)
- ∞ Conversion Calculator is a JavaScript-based tool to aid in the process of scaling quantities in recipe preparation (http://xawaash.com/?page_id=7039)
- ∞ Planned: Adapting the content to Android & iOS mobile apps as well as an eBook

Recipe Post Generator (Web App)

Ongoing project: designing a web application/tool designed to facilitate the process of creating recipe posts primarily for food blogging. Users will be able to input the various elements of a recipe ranging from predefined fields, such as the title, to variable elements such as ingredients and directions.

- ∞ Input will be processed accordingly to generate the HTML content for the post
- ∞ The database system is planned to be integrated into the development of a mobile application