WANDA B. K. BOYER

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EDUCATION

MSc.   Completed Aug. 2016
Computer Science
University of Victoria
Victoria, B.C., Canada

BSc.   Completed Apr. 2012
Combined Computer Science and Mathematics
University of Victoria
Victoria, B.C., Canada

Awards and Scholarships

Further history available upon request.

Title	Year	Description
UVic Graduate Award	2015	Received during undertaking of CSc master's degree.
UVic Fellowship	2012	Received upon entry to CSc master's degree.
UVic Outstanding Applicant's Award	2012	Received upon entry to CSc master's degree.
Undergraduate Research Scholarship	2010	Studied "almost Pythagorean triples" in relation to solving the Diophantine Equation $x^2 + y^2 = z^2 - \alpha$ for a variety of values of α using elementary methods.

PERTINENT WORK EXPERIENCE

QA Automation Engineer   Nov. 2017 - May 2018 (Closure of NDG)

Globalme at Intel

Involved in the major refactoring of the coding style and project structure of the ESA framework to improve usability, in addition to performing further work to refactor, debug, and expand the underlying ESA libraries. Learned to read **Jenkins** console data as well as serial com logs during deep investigations into product behaviour in the context of automated testing. Engaged in code reviews and participated in stand-up meetings to keep apprised of team activities and to share my progress. Assisted with the maintenance of the test farm, particularly the setup and configuration of iOS test benches, which I then thoroughly documented on **Confluence**. Was exposed to IntelÕs iOS software development process when adding accessibility labels to page object elements as required for automation. Assisted in the execution and reporting of daily integration tests for Android and iOS, as well as troubleshooting and improving these test suites. Designing **SQLite** Database schema to support automation framework grid, as well as the web UI using **Django**, bootstrap, and crispy forms. Assisted with implementation in Python of libraries for interaction with Android phones.

Software Dev. QA Engineer 1   Dec. 2016 - Nov. 2017

Fortinet Technologies

Took ownership of numerous antivirus certification dispute processes, requiring the development of scripts and modules to support detailed technical documents. Responsible for implementing new features or modifying existing functionality for production systems, such as the cloud-based behaviour scan server. Constructed a complex federation of **Django** applications comprising a user interface for use by antivirus analysts, drawing upon the entire set of sample data collected since the company's inception as well as querying the **ElasticSearch** REST API, and presenting this data using bootstrap, crispy forms, and the datatables **JQuery** plugin.

Visitor Service Network Accessibility Analyst Co-op   May 2011 - Aug. 2011

Art Gallery of Greater Victoria

Incorporated a public wireless network into the existing network infrastructure, as well as created a content delivery system using Drupal to enable gallery patrons to access supplementary multimedia content for each piece in the gallery.

Quality Engineer Co-op   Jan. 2010 - Apr. 2010

IBM Canada Software lab

Maintained the IBM Forms software product by creating and using test suites, both manual and automated; wrote detailed bug reports whenever an error was encountered, and worked with the development team to resolve them.

SELECTED PROJECTS

GO Game
SWIFT

Designed and implemented the game of Go for iOS, written in **Swift** using **UIKit** for the user interface, **SpriteKit** for the game board and logic, and **Realm** for the storage .

ION Framework
PYTHON

Designed **SQLite** Database schema to support automation framework grid, as well as the web UI using **Django**, bootstrap, and crispy forms. Assisted with implementation in **Python** of libraries for interaction with Android phones.

Petfacts API
JAVA

Implemented an API using **Flask** and FlaskRestful to respond to POST requests made when users enter a slash command on a given slack channel to deliver fun facts about pets. Hosted on **Amazon EC2** instance running Ubuntu 16.04LTS, with WSGI using **GUnicorn** and serving content using **NGINX**.

Cloud-based behaviour scan server
PERL, PYTHON, PHP

Modified existing **PHP** and **Perl** code to swap out sandboxing functionality, instead making API calls to the FortiSandbox, and parsing the results to facilitate integration with FortiClient endpoints.

Modal Solver Suite
PYTHON

A decision and minimization procedure for modal logic which allows for user-specified conditions on the relational structures produced, returning concrete visualizations if a pointed model exists for the input formula(s).

RELEVANT SKILLS
Technical Skills

Programming languages:	Python, Perl	Developing new scripts and modules, as well as modifying existing production code.
	Swift	Experience with both UIKit and SpriteKit for UI element creation. Knowledge of MVC and MVVM design patterns. Used both CoreData and Realm for persisting app data.
	Java, C, C++	Working knowledge of language constructs and available libraries.
	MySQL	Constructing queries on data models that underlie production code, and using the MySQLdb Python connector to incorporate queries in workflow.
	Google Apps Scripts	Experience writing custom functions to improve workflow using Google Sheets.
Testing frameworks:	Python	Unittest, Pytest, Robot Framework.
	Java	JUnit testing
	C	GDB
IDEs:	Vim	Experience compiling from source for Python 2 or 3 support to enable the use of Jedi Vim for code completion, and using bundle and pathogen to otherwise configure Vim as my daily development environment.
	PyCharm, and Eclipse	Performing project management with Git integration, setting up virtual environments for different interpreter and package requirements.
Source Control:	GIT, Subversion	Used in everyday workflow to organize and coordinate feature development in production systems.
Operating Systems:	Linux (RHEL and Ubuntu)	Comfortable using terminal for package management, piping commands, and bash scripting.
	OSX	Able to apply Linux knowledge to working proficiently with terminal.
	Windows	Knowledgeable about the Windows file systems, and work fluidly with the GUI as well as in DOS prompt. Have written batch scripts and used AutoIT for testing automation.

Personal Skills

- Confident public speaker with a clear and comprehensive explanatory style.
- Excellent technical writing skills, expressing complex ideas concisely.
- Detail-oriented project management skills, easily coordinating tasks with team members.
- Highly personable, possessing a finely-tuned sense of professionalism.

COMMUNITY INVOLVEMENT

Talks

Venue	Year	Title
Globalme at Intel	2018	The Petfacts API: Implementing Slack Slash Commands using FlaskRestful and Amazon EC2
SPACE Program	2016	A Decision Procedure for Modal Logic, With Applications to Quantum Kitten Theory
SPACE Program	2013	Game Theory and Modal Logic

Volunteer Work

Further history available upon request.

Mentor at Teachers Learning Code   July 24-26, 2018

Canada Learning Code

Technical Support and Campaign management   August 2017-Present

Globe in Peace

Mentor at Using Data to Solve Problems   Sept. 23, 2017

Ladies Learning Code

Mentor at Data Insights with Python for Beginners   Sept. 10th, 2016

Ladies Learning Code

IT Admin assistant   Sept. 2011 - May 2012

Art Gallery of Greater Victoria

ACTIVITIES AND INTERESTS

I am a voracious reader and enjoy immersing myself primarily in works of fantasy and science fiction. Additionally, I love reading popular science books as well as more technical texts pertaining to mathematics and computing.

As a lifelong learner, I have undertaken several online courses through the edX platform, namely DEV210x (Introduction to C++) and MITX6.00.2x (Introduction to Computational Thinking and Data Science), DAT210x (Programming with Python for Data Science), and most recently two C courses through Lynda.com by Dan Gookin. I have successfully completed COMP 3912: iOS Application Development at BCIT. Finally, I have been brushing up on my French language skills using Duolingo.

My artistic interests are diverse: I am an amateur singer, having sung second soprano and first alto parts in the University of Victoria Philomela Women's Choir and the Simon Fraser University Choir; an amateur artist specializing in traditional media such as ink and watercolour pencil crayons; and finally, an avid knitter.

References available upon request.