

## Kevin A. Howell

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Raleigh-Durham, NC

### CAREER OBJECTIVE

To transition out of the Java ecosystem and into Python or Ruby

### PROGRAMMING SKILLS & SOFTWARE

Proficient in **Java**, **Python**, **Groovy**, **C**, **C++** programming languages, always excited to learn others  
Extensive skills and experience in **HTML**, **JavaScript**, **jQuery**, **CSS**, **XML**, **XSD**, **SQL** technologies  
Extensive skills and experience in **cross-browser issues and hacks** (JS and CSS)  
Experience in **J2EE**, **Spring**, **Stripes Framework**, **JDBC**, **Hibernate**, **JAX-RS (REST)**, **JAX-WS (SOAP)** frameworks/APIs  
Experience in **JUnit**, **Selenium IDE**, **Firebug**, **Valgrind**, **GDB** testing and debugging tools  
Experience in **Maven**, **CMake**, **GNU Make**, **Git**, **Mercurial**, **SVN**, **CVS** build and SCM systems  
Extensive experience in and a strong preference for **Unix** environments, especially **Linux** and **Cygwin**

### OTHER SKILLS & QUALITIES

Effective communication in-person and remotely with both technical and functional team members  
Ability to handle multiple projects at once  
Ability to communicate UI design options effectively using mock-ups, diagrams, etc.  
Comfortable in unfamiliar territory; ability to adapt quickly to unfamiliar concepts/situations  
Strong belief in sharing knowledge and best practices with others  
Strong belief in documenting code, testing, and keeping things maintainable

### EXPERIENCE

#### Consultant

Fairfax, VA/Durham, NC

CGI Federal  
August 2011 - present

- Designed and developed Java EE webapps used by EPA to collect chemical information from the chemical industry (utilizing Stripes Framework, Hibernate, Spring, JAXB, jQuery).
- Designed and developed utilities to sanitize, transform, and report on collected chemical data.
- Wrote shared jQuery plugins for UI components.
- Edited and improved XML schemas (XSD).
- Designed and developed custom ETL solutions, with various source and target databases including Oracle, Documentum (DFC), and MS Access.
- Developed custom data parsers in Python and Groovy (for CSV files and XML with rapidly changing schemas, respectively).
- Worked with senior developers to improve development practices/processes and to promote knowledge sharing among developers within the account group.
- Debugged and maintained various production applications.

#### Webmaster

Yorktown, VA

<http://www.fifes-and-drums.org/>

Fifes and Drums of York Town  
December 2009 - present

- Redesigned the site; migrated old content to the new layout.
- Wrote a photo gallery script which generates photo galleries from uploaded directories of pictures.
- Developed an event participation tracking system (online promise sheet).
- Utilized PHP, MySQL, HTML, and CSS.

#### Lab Consultant

College of William & Mary

Department of Computer Science  
Spring 2010 - Spring 2011

- Tutored students in fundamental course topics such as object-oriented programming and data structures.
- Debugged students' Java and Python code.

## SELECTED PERSONAL PROJECTS

### **ajax4stripes**

**Java**

AJAX functionality for the Stripes Framework, inspired by ajax4jsf/RichFaces.

<https://github.com/kahowell/ajax4stripes>

### **XML Fuzzer**

**Python**

Produces (pseudo-random) XML given an XSD file. Attempts to produce well-formed, schema-validating XML. Prototype/proof of concept.

<https://github.com/kahowell/xmlfuzzer-python>

### **physfs++**

**C++**

C++ wrappers/streams for PhysicsFS (cross-platform file I/O library). Developed as a exercise to learn custom C++ streams.

<https://github.com/kahowell/physfs-cpp>

### **icon-makefile**

**Bash**

Given a base set of 16x16 icons, generates various colors and sizes of icons using ImageMagick and hqx.

<https://github.com/kahowell/icon-makefile>

More at <https://github.com/kahowell>

## COMMUNITY INVOLVEMENT

TriPython (Triangle Python User Group)    Member    <http://tripython.org>

TriLUG (Triangle Linux User Group)    Member    <http://trilug.org>

## EDUCATION

College of William & Mary, Williamsburg, VA

**Bachelor of Science, Computer Science**, May 2011

Minor in Mathematics

Major G.P.A. 3.92 / 4.0

Dean's List

Independent Study of CPU/GPU Techniques for Visibility Determination

Relevant coursework includes:

- Graphics & Scientific Visualization
- Systems Programming
- Web Programming
- Intro to Quantum Computing
- Multicore Computing
- Compiler Construction
- Operating Systems
- Computer Architecture
- Network Systems & Design
- Software Engineering