Blair Gemmer {blairgemmer.com – blair.gemmer@gmail.com – 406.253.4962}

Experience

Freelance Software Developer   May 2012 - Present
{**Missoula, Montana**}

* Developed biological models in Matlab.
* Developed applications for scraping image data from websites.
* Updated and developed web applications.
* Performed data analysis on personal financial systems.
* Developed applications to test security of personal network.

Teacher's Assistant for **Programming Languages**   Spring 2012
{**University of Montana-Missoula**}

* Graded all assignments, papers, and exams. Also, maintained office hours to be available out of class for individual tutoring and fielding questions from students.

Teacher's Assistant for **Computer Ethics**   Fall 2011
{**University of Montana-Missoula**}

* Graded all assignments, papers, and exams. Also, maintained office hours to be available out of class for individual tutoring and fielding questions from students.

Instructor for **Computer Modeling**   Fall 2010 - Spring 2011
{**University of Montana-Missoula**}

* Taught freshman and sophomore students advanced features of Microsoft Excel and Access and assisted them during labs.
* Graded all assignments and exams and maintained office hours to be available out of class for individual tutoring and fielding questions from students.

Web Developer for the **Maven Project**   Summer 2009
{**Lifelong Learning Center, University of Montana-Missoula**}

* Developed web application for course creation to replace current Banner system.

Web Developer for the **Undergraduate Research Conference**   2008
{**University of Montana-Missoula**}

* Developed web application for application forms, submission forms, and display of undergraduate research papers and posters.

Technical

Languages (Proficient): Python, C#, Matlab, Java, R, LaTeX

Languages (Familiar): C/C++, Perl, OCaml, Ruby, Javascript

Databases: MySQL, SQL Server, Access

Frameworks: jQuery, Ajax, ASP.NET

Tools: GIT, Mercurial, Visual Studio 2012, Emacs, VIM, Android SDK

Operating Systems: Mac OS X, Windows, Ubuntu Linux

Techniques: User-Centered Design, Iterative Design, Rapid Application Development

Education

University of Montana-Missoula
M.S. Computer Science May 2014

Emphasis in Machine Learning, Data-Mining, and Simulations

University of Montana-Missoula
B.A. Psychology   May 2010

Selected Projects

More information for the following projects can be found on my graduate portfolio blairgemmer.com and the source code is on GitHub @blairg23

Apocalypse Defense
A mobile zombie tower defense game written in Java for the Android 2.3 operating system.

Bak-Tang-Wiesenfeld Model for Displaying Self-Organized Criticality
Otherwise known as the Abelian Sandpile Model, written in Python using the Matplotlib module.

Earthquakes
A Python script to plot earthquakes that have occurred in the world, using the Matplotlib Basemap module.

Hoot, aka The Wolf Box
A hardware/software solution for broadcasting and recording sounds in adverse climates.

Particle Simulator
A particle physics simulator written in Python using the OpenGL libraries.