



# Bao Pham

Combined Major Computer Science and Mathematics - 3<sup>rd</sup> year

## TECHNICAL SKILLS

- **Languages:** Python, Ruby, Java, C++, Shell script
- **Database:** PostgreSQL, MongoDB
- **Web Development:** HTML, CSS, PHP, JavaScript, jQuery
- **Version Control:** SVN, Git
- **Operating Systems:** OSX, Windows, BSD UNIX
- **Content Management:** Drupal

## SCHOOL PROJECTS

### Basic Algorithms and Data Structures CPSC 221

- Implemented a maze solver algorithm in C++
- Achieved 100% for the project

### Introduction to Software Development CPSC 211

- Designed and implemented a photo library application to display photos using Java Swing
- Employed JUnit testing
- Implemented tag cloud as a bonus
- Achieved over 100% for the project

### Introduction to Computation CPSC 111

- Implemented the Game of Life in Java - a cellular automaton devised by the British mathematician John Horton Conway
- Achieved 100% for the project
- Being inspired by the success of the project, ported the Java program into HTML5 and JavaScript

## PERSONAL PROJECTS

### Personal website

- <http://baopham.heroku.com> powered by Ruby/Rack
- A site for me to learn and explore new technologies
- Includes interactive chess game, matrix calculator, Game of Life animation using HTML5 and JavaScript

### Github Repos

- <http://github.com/baopham>
- Languages: Ruby, Python, VimL, PHP, JavaScript

## WORK EXPERIENCE

**Web Developer (Co-op)** May 2012 – Aug 2012 UBC Computer Science

- Learned PHP and Drupal from scratch
- Created a PHP web application to convert bibliography files to CSV
- Developed 2 custom modules for UBC Drupal website:
  - » Integrate with UBC's recording system and let user schedule a recording
  - » Add custom rule validations for a content type
- Implemented a BibTeX plugin for Drupal module "Views Datasource"

**Bioinformatics (Co-op)** Sept 2011 – Apr 2012 Genome Sciences Centre

- Key person to process the team QC's reports
- Developed Python modules for the team to parse report files to HTML and upload to Plone
- Collaborated closely with the team members to help produce and format accurate reports
- Coded shell scripts to extract data from the system
- Had the opportunity to work with the underlying distributed system consisting of multiple databases
- Displayed strong analytical skills by finishing work with minimal supervision and in a short period of time

**Private Tutor** Sept – Dec 2010

- Tutored a Grade 12 student in Math
- Motivated and encouraged her to excel in the subject

## VOLUNTEER EXPERIENCE

**Patient Assistant** May 2009 – 2010 Burnaby Hospital

- Helped elderly patients be more active and feel more comfortable
- Actively engaged them in conversation to make them happy

**Career Days Host** Sept – Oct 2009 UBC

- Organized the program where 65 employers and 45 graduate schools come to present themselves and attract potential students
- Helped the employers and graduate schools' representatives set up their presentations
- Guided students to the right place and provided answers to their queries

**Cashier at Gift Shop** Sept 2007 – 2008 Vancouver General Hospital

- Accurately handled various types of transactions such as credit, cash, cheques and balancing of accounts at the end of shifts
- Restocked and delivered flowers to patients

## EDUCATION

**University of British Columbia**

- Awarded President Entrance Scholarship for excellent performance in High School

## INTERESTS

- Computer Science, Mathematics, Technology, Web Development, Music, Poetry, Literature