



# Bao Pham

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

## TECHNICAL SKILLS

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

## SCHOOL PROJECTS

### Interactive Design CPSC 3240

- Won 3<sup>rd</sup> place for the group project on the improvement of the photocopy machine interface

### 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.herokuapp.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:
  - » Integrated with UBC's recording system to let user schedule a recording and upload to Youtube
  - » Added customizable features to Computer Science room booking system
- Implemented a BibTeX plugin for Drupal module "Views Datasource"
- Provided patches for various Drupal modules, such as Organic Group, OG Access Roles, Node Access User Reference, OG Archive Groups.

### 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 Math Tutor Sept – Dec 2010

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

## EDUCATION

### National University of Singapore

- Participated in the UBC Exchange program
- Received NUS-UBC Lee Foundation Award
- Won 3<sup>rd</sup> place for an HCI group project on the improvement of the photocopy machine interface

### University of British Columbia

- Awarded President Entrance Scholarship for excellent performance in High School

## INTERESTS

- Computer Science, Mathematics, HTML5, JavaScript, Ruby, Vim, ZSH