

# Ngoc Pham

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## EDUCATION

**University of South Florida**, Tampa, FL Graduated: May 2015  
Master of Science in Information Systems - MS MIS – GPA: 3.92/4

**University of Otago**, Dunedin, New Zealand Completed: November 2011  
Postgraduate Diploma in Science, Telecommunications – GPA: 7.86/9

**University of Engineering and Technology**, Hanoi, Vietnam Graduated: June 2009  
Bachelor of Science in Information Technology - GPA: 7.78/10

## EMPLOYMENT EXPERIENCE

**SiteWit Corp.**, Tampa, FL *September 2014 – Present*  
**Software Developer**

- Design solutions for company's mobile app, available for iOS and Android devices, using Xamarin. Responsible for the majority of backend, shared between the two platforms, and the Android app at the beginning. The backend shared code is responsible for all the operational-level logics, for example, consuming REST APIs endpoints for data, saving to an on-device SQLite database, providing the data to the platform-specific code to render with the UI.
- Create a few REST APIs with ASP.NET Web API v2, emphasizing on readability, and maintainability of code with extensive use of Action Filter Attributes and Model Validations
- Design a new mechanism for user to preview real-time searches for keywords on Google, subsequently make it easier for them to decide if the keywords are relevant to their businesses or not. The new feature helped increase conversion for company 2-4 times.
- Develop a handful of services/libraries for background processing of data among main operations within company's system, which interact with SQL Server and/or MongoDB, and several third-party services, via either their SDKs, or REST APIs.
  - Notification Service: in charge of querying SQL Server then creates notifications to be displayed on web/mobile and/or sent to mobile devices via Parse
  - Ad Shipper Service: keeps track of users in system who finished building visual ads but have not made purchases yet to show themselves with ads they created, in cooperation with TradeDesk. This is using the product to advertise itself.
  - Image Queue Service: helps minimize wait time at front-end visual ad building by queueing and processing heavy-lifted tasks behind-the-scene, involving talking to Pixabay, ClarifAi, Amazon S3, to store stock photos selected by users in in-house database for better categorization and suggestion in the future
  - Google Product Feed Sync Service: processes e-commerce based accounts (Ecwid) and underlying products to send to Google Merchant Center so that users can advertise their stores in Google, using Google Content API
- Rewrite company's [WordPress plugin](#) from ground up with support for newer APIs, and practices, such as using Composer package manager
- Create several small libraries for internal use
  - Logger: with support for multiple channels (file/Windows Event/in-memory, etc.) and error reporting via email (extensible) if needed
  - Helpers: provide small methods for repetitive tasks to improve code readability and consistency
- In charge of parts, both back end (C#) and front-end (JavaScript/jQuery), in a WhiteLabel project, which utilizes ASP.NET MVC 5

- Learn a whole new aspect of development using Windows platform, with products like SQL Server, Visual Studio, C# and .NET framework, Team Foundation Server/Git for source code management
- Get familiar with development concepts and practices, such as Unit Testing, Dependency Injection, Agile/Scrum

## **Freelancer**

*May 2010 – Present*

### **PHP Developer & System Administrator**

- Develop and maintain a Joomla component for High School sports teams in the United States with various modules to administer organizations/schools, teams, athletes, coaches, game schedules and seasonal rosters
- Build a web application (CodeIgniter with MySQL database) for managing products for a reseller, including loading item details from external sources, maintaining local database of necessary information, and exporting to CSV file, ready to be imported into Magento e-commerce platform
  - Decreased time for importing data from file, for about 20 times for nearly 50,000 records, by using MySQL "LOAD DATA INFILE" method
- Manage a Web Server (Ubuntu) hosting over 200 websites using Apache, PHP and MySQL. Other services in-use: DirectAdmin, AIDE integration checking, fail2ban, and custom automation scripts for backing up critical data (files & databases) to Amazon S3, or finding possibly malicious code injections and cleaning up, etc.

## **BraveBits Co., Ltd, Hanoi, Vietnam**

*February 2012 – July 2013*

### **Senior Developer & Technical Support Supervisor**

- Developed mainstream Joomla templates and extensions using PHP (Joomla framework), MySQL, JavaScript, CSS and HTML
- Created tools to automate part of business processes using PHP (CodeIgniter framework), Bash scripts, and Git for version control, helping saved about 2/3 the time for such tasks
  - Generate XML-formatted sample data for customer-side installation from product demo sites
  - Update templates/extensions to product demo sites whenever a new version is released
  - Deploy changes to live demo sites via Git, with a custom-coded PHP library for interacting with BitBucket RESTful API
- Built a service to enable customers to create their own demo websites, forked from company's product demo sites, integrated with server cronjobs to automatically terminate after a period of time
  - Decrease site building time, as well as total size for storage by using symbolic-link system, leading to longer availability of demo sites under same server specifications
- Administered one Windows server (Windows Server 2003, in-house) for employee account management, and multiple Linux boxes (Ubuntu, cloud) for web-related services with automated backup scripts and file integrity analysis service
  - Detected and mitigated a massive self-generated traffic that caused irresponsibility of the main server
- Conducted code review and performance analysis to product codebase with tools like Firebug (Mozilla Firefox), Developer Tools (Google Chrome), and Xdebug (PHP)
  - Cut page load by 5-20 times for a mainline product, by finding and removing a few unnecessary loop controls
- Supervised customer support threads (dedicated ticket system for paid users and free forum) to improve quality, in terms of language (English) proficiency and issue reporting efficiency
- Troubleshoot simple technical problems with staff's workstations, both Macs and PCs, including network connectivity, OS and application usage issues, etc.
- Write up tutorials for other employees, and articles to be published on company blog for references

## **XIPAT Flexible Solutions Co., Ltd, Hanoi, Vietnam**

*February 2009 – October 2009*

### **Joomla Developer**

- Participated in Joomla-based outsourcing projects
- Developed Joomla 1.5 templates and extensions

- Modified existing code to be compatible with latest Joomla version, or to have customized functionalities as of customers' demands
- Converted Adobe Photoshop designs into HTML newsletters with multi-platform/client compatibility
- Supported troubleshooting infrequent problems with local network setup

## ACADEMIC PROJECTS

### **Business Analysis**, Management Information Systems, USF

*November 2013*

- Carried out a Business Analysis on the Contract Approval process at University of South Florida (USF)
- The (old) process has been managed, mostly manually with paper work, by USF IT Financial Management (USF ITFM), University Controller's Office (UCO), and USF Purchasing Department
- Proposed 3 alternative solutions for better management of contracts across different departments
- Prepared a cost/benefit analysis of one recommended solution
- Based on assumptions, the recommended alternative would be able to save about \$100 million on total annual contract costs for USF

### **Radiology Teaching Files**, Dissertation Project, Otago

*March 2011 – November 2011*

- Aimed for building a web-based repository of radiology images for teaching and researching purposes
- Developed a demo web application using CodeIgniter with features: authentication, management of radiology files (with AJAX image annotation), and image search backed by a simple Content-Based Image Retrieval (CBIR) implementation
- CBIR experiments were carried out to measure performance of two popular feature descriptors, Color Layout Descriptor (CDL), and Local Binary Patterns (LBP) using Python scripts
- The features of the images, stored in a SQLite database, then were used to test the accuracy of image comparison using 2 methods
  - Self-implemented Python script utilizing Euclidean distance
  - Weka (a machine learning toolkit) with 2 classifiers (k-NN and SVM) and 3 feature selectors (ReliefF, Information Gain, and mRMR)

### **Yahoo! 360 Connection Builder**, Bachelor Thesis Project, UET

*February 2009 – May 2009*

- Used a so-called WAVE technology to collect connection information among users on Yahoo!360 network, the most popular social network in Vietnam at the time
- WAVE implementation done with Java, with core functionalities mainly contributed by two other group members to provide a decentralized, parallel computing system
- WAVE was used to create a knowledge base of connections between blog users (nodes), with certain criteria, that later on can be utilized for analytic purposes, for example, to find users with same interests coming from same city
- The WAVE core features were accomplished, but a friendly query system was not yet finished to provide a user-friendly interface for accessing the knowledge network
- The working implementation of WAVE, with a simple HTML Web crawler/parser (also written in Java) was able to use 4 PCs (on the same LAN sharing a 4Mbps Internet connection) to retrieve approximately 200,000 unique nodes in less than 1,000 seconds

## SKILLS

- Attention to details
- Critical thinking
- Quick learner
- Proactive with work
- Relatively familiar with Linux-based systems

## INTERESTS

- Finding and integrating new tools to improve or automate personal workflows (Raspberry Pi)
- Helping and contributing (if possible) on StackOverflow or GitHub
- Write wrap-up tutorials on the subject and post on [personal blog](#)
- Exploring and catching up with new technologies, both software and hardware
- Playing soccer, Pro Evolution Soccer (video game), and badminton
- Photography, occasional
- Travel – been to Phnom Penh & Siem Riep (Cambodia), Queensland (New Zealand) and places in Vietnam and the U.S.