

3514 Arcadia Street • Evanston • Illinois • 60203

Experience

2/2010 – present, **Northwestern University** (<http://osep.northwestern.edu/>)

I am the current lead developer for all software initiatives, including the iLab and EcoCasting projects, and I work in conjunction with our partners at National Geographic on the software for the Watershed Dynamics project. I work in the Office of STEM Education Partnerships whose mission is supporting K-12 students and teachers by connecting them with the world-class STEM resources of Northwestern University.

Software Developer

- Support and advise curriculum and content experts on technology decisions within department.
- Implement new iLab client for ICP-OES instrument [Flex / AS3 / .NET / PHP]
- Create series of models to support learning goals in EcoCasting project [NetLogo]

1/2009 – present, **SpeakSake** (<http://www.speaksake.com/>)

When this start-up lost their CTO, I was brought in to complete the website. I have been balancing the needs of an expedient launch against the functionality, security, and aesthetic requirements of the website and associated server infrastructure.

Website Technical Lead

- Work closely with CEO and board members to guide and implement website.
- Maintain website front end and administrative back end [PHP / MySQL / jQuery].
- Incorporated an e-commerce payment system into the website and performed extensive security tests [PHP].

6/2007 – 10/2009, **Chicago Software Solutions** (<http://www.chicagoit.com/>)

During my time at Chicago Software Solutions I worked in many different capacities, as outlined below. However, there were common threads throughout the experience. I lead multiple, simultaneous projects through their full life-cycles: from design and architecture to final product delivery. I worked directly with clients to translate their needs into solutions that met their budgetary, technical, and aesthetic constraints.

Lead Software Developer, Video Conferencing Project

- Lead implementation team.
- Designed solution which included:
 - » Desktop application [Flex – Adobe AIR]
 - » Desktop background service [Visual Basic.NET]
 - » Web video viewer / chat client / document sharing service [Flex – Adobe Flash]
 - » Administrative website [PHP / MySQL]
 - » Chat plugin for media server [Java]
- Successfully brought project in on time using three previously unused technologies (Flex framework, Wowza Media Server Pro, and Amazon EC2 architecture).

Lead Software Developer, Food Industry's Internal Business Solution

- Migrated legacy Access application to web application [PHP / MySQL / jQuery].
- Normalized and updated database to enforce data integrity.
- Evaluated performance of new web application at up to 10 times faster than legacy application.

Lead Software Developer, Medical Data Capture Project

- Designed and implemented multi-platform commercial software package for Windows and Mac OS X to synchronize with applications on both Palm and PocketPC hardware. [Access / Wise / FileMaker Pro / Iceberg / Satellite Forms].
- Implemented custom Palm synchronization conduit for Mac OS X in Objective-C [Xcode].

Software Developer, Financial Trading Services Website

- Maintained and upgraded website which supported an active user base in the thousands, required a 99% up-time during market hours to post current trade data, and processed hundreds of thousands of unique page requests per day. [C#.NET].
- Created services to process nightly trade reconciliations.
- Championed the usage of encryption and secure transmission protocols for the movement of sensitive financial information, which had previously been moved in plain-text over unsecured FTP.

1/2002 – present, **Barclay Sheaff Consulting**

Needing to maintain a flexible schedule, I started a consulting firm with a colleague. My responsibilities included creating websites, network management, hardware and software installation, as well as support for all the above.

IT Consultant

- Started a web design and hosting business which, within two years, had several local, multimillion-dollar businesses as clients.
- Created websites including:
 - » <http://www.canastamusic.com/> for local Chicago band, Canasta. Functionality includes forum and custom CMS for articles and photos [PHP / XML / XHTML / CSS].
 - » <http://www.hayes-lango.com/> for law firm [Drupal / PHP].
- Designed and implemented many private and commercial websites using PHP, XHTML, CSS, Adobe Flash, Adobe Photoshop, and FreeHand.
- Installed and repaired hardware and software on personal computers, including but not limited to Windows XP, Windows 2000, Windows 2003 Server, Microsoft Office.
- Taught computer classes and engaged clients to educate them during on-site visits.

11/2000 – 8/2001, **Patterson, Gray & Associates** (<http://www.pattersongray.com/>)

My primary responsibility was the legacy database code [MUMPS] for a private medical practice. I updated and expanded the database functionality and integrated it with new desktop and web clients.

Programmer

- Worked in a small team using an iterative and incremental development approach.
- Implemented new user interface in Visual Basic.
- Supervised and mentored junior programmers.

Technical Summary

Languages

PHP	C/C++	ASP	XHTML
Python	C #	Visual Basic	CSS
MySQL	Objective-C	Pascal	LaTeX
JavaScript	Java		
ActionScript			

Tools

Visual Studio	Apache	Drupal	Microsoft SQL
Flex	IIS	Joomla!	Server
Eclipse	Subversion	Adobe Photoshop	Microsoft Office
Xcode	Git	Adobe Flash	Microsoft Access
NetBeans			FileMaker

APIs

Microsoft .NET Framework
jQuery
Django

Operating Systems

Windows XP	Mac OS X
Windows Server 2003	Linux
Windows 2000	AWS & EC2
	HP-UX

Education

Bachelor of Arts in Computer Science Kalamazoo College
Acquired college credit while still in high school.

William Rainey Harper Community College
Post-graduate studies in math and science.