

3514 Arcadia Street • Evanston • Illinois • 60203

## Experience

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

I am the current lead developer for the iLab (<http://ilabcentral.org>) and EcoCasting (<http://ecocasting.northwestern.edu>) projects, and I work in conjunction with our partners at National Geographic on the software for the Watershed Dynamics (<http://wd.northwestern.edu>) project. I work in the Office of STEM (Science, Technology, Engineering, and Mathematics) 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#	ASP	XHTML
JavaScript	C/C++	Visual Basic	CSS
ActionScript	Objective-C	Pascal	LaTeX
Java			

### 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

### 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.

## References

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