

Robert Riley

Senior Software Engineer

✉ bob@synthetictthought.com ☎ (602)740-4261 📍 Chandler, AZ

Skills

Languages

C#, C, PHP, Javascript, SQL, HTML, CSS

Development Types

Web Apps, Windows Apps, WordPress plugins, Embedded Systems

Operating Systems

Linux, Windows, pSOS+

Miscellaneous

ASP.NET, AJAX, Bootstrap, design patterns, Git, jQuery, MFC, MySQL, REST, SNMP, SQL Server, Windows Forms, WPF, Wireshark

Professional Experience

2023 – present

Founder / Software Engineering Consultant

Synthetic Thought LLC

Developing software for different businesses, including Synthetic Thought itself.

- Developed business valuation tool. Tech: C#, REST, Javascript, Bootstrap, WordPress
- Maintaining Kids Video Player mobile app. Tech: Java, Android

2015 – 2022

Co-Founder / CTO

Snap Creek Software

- Responsible for development of *Duplicator* and *Duplicator Pro* backup and migration plugins. (*Duplicator* is one of the top plugins for WordPress with over 30 million downloads) - PHP/MySQL/JavaScript/HTML.
- Hired, and managed team of developers to continue maintenance and development of both *Duplicator* and *Duplicator Pro*.
- Solved non-trivial technical challenges such as chunking transfers and data archiving across multiple web requests.
- Designed and implemented custom archive format which allowed storage of archives up to 150GB+ which wasn't possible with default zip library included in PHP.
- Performed many technical and non-technical tasks associated with starting and growing a small business.

2012 – 2014

Senior Software Engineer

Paychex

- Developed time tracking software for clocks running Compact .NET framework.
- Developed time-off accrual component of time and attendance software in ASP.NET.

2008 – 2012

Senior Software Engineer

Lumension

- Developed and maintained module installation system for Lumension's security suite
 - XML-based scripting processor performed system operations like registry manipulation and app functionality like text/XML editing. Component handled 'rollback' to ensure state was preserved upon failure occurred.
 - Enhanced Silverlight front-end and Windows service that drove install component.
- Enhanced open-source vulnerability assessment tool

- Official engine responsible for executing security tests created by NIST.
- Lumension's representative to the standards-based 'OVAL Language' community.
- Kept Lumension version of the product in sync with community code line.
- Enhanced patch server reporting and control software running on ASP.NET.

2006 – 2007

Software Contractor

Wells Fargo

- Developed computer management system built from scratch.
 - Remotely monitored several hundred computers across the country.
 - Tracked machine heartbeats, collected performance counter / registry key information and determined package installation status.
 - Configured via roles, configuration groups and Active Directory synchronization.
 - System composed of management web site, a web service, a Windows service running on 2003 Server, a Windows service (agent) running on each workstation.

2005 – 2006

Software Contractor

Direct Alliance

- Served as Lead of Offshore Team for 800 KLOC Direct Sales ERP System. Designed implementation patterns for system and instructed team how to refactor system.
- Created design documents from business analyst input. Documents contained text and UML and were used by development team to implement functionality.

2004 – 2005

Software Contractor

Intel

- Developed GUI client for automation system – interacted with server to control and configure test jobs running on PCs running tests on XScale evaluation boards.
- Developed utility that parses XScale specification files and converts them into XML.

2000 – 2004

Senior Software Engineer

Motorola

- Developed app management and checkpoint software. Components were developed in C and utilized Linux API calls and a robust TCP/IP based messaging system.
- Developed two MIBs and network management extensions to SNMP agent (NET-SNMP) running under Linux. Used to manage a rack of single board computers.
- Extended Java SNMP agent responsible for process-monitoring and packet statistics.
- Developed database update Windows Service for emergency radio system.

1999 – 2000

Software Engineer

Grid Data

- Developed message handling software residing in wireless vehicle tracking device (C).
- Developed MFC application used to control wireless tracking device via RS-232.
- Developed vehicle plotting application in Visual Basic.

1997 – 1999

Software Engineer

Motorola

- Developed communications controller in wireless military computer network.
- Developed board support package / device drivers for the 68360 processor.
- Integrated military link-level protocols/drivers with TCP/IP stack in pSOS+.

Education

1996

Bachelor of Science - Electrical Engineering

University of Illinois at Urbana-Champaign

Focus on embedded systems