

Technical Competencies

Bootstrap	PHP	MVC
JavaScript	Python	MVVM
C/C++	WPF	Mustache
C#	jQuery	GCC
ASP.NET	KnockoutJS	GNU
LINQ	AngularJS	.NET
SQL	React	Linux

Experience

Software Engineer

July 2013 – Present

Medical Informatics Engineering

- Responsible for significant portions of WebChart and Enterprise Health – two of the largest proprietary web-based EHR systems for MIE – written in C, HTML, JavaScript.
- Contributed to multiple roles within team of 19 Developers – charged with utilizing many technical skills as organization continues to grow.
- Primarily responsible for development for new features and enhancements – including EPCS module utilizing a two-factor authentication system to meet federal regulations.
- Actively participate and lead code reviews – overseeing and signing off on progress – while also giving them feedback and guidance.
- Subject matter expert for medications and other related interfaces. This includes med history, prescribing, remembered scripts, warnings and alerts, etc.

Project Examples

Interactive Workflow Interface Initiative:

- Tasked with taking lead while also performing hands on development for major, company-wide initiative to design, develop and deploy enhancement to current legacy system.
- This “DIY Menu” enhancement allows physicians, support staff and all key stakeholders to streamline frequent tasks and workflows that are typically cumbersome, time-consuming and involved.
- Utilized feedback gathered from the business/end-users to design significant new functionality including:
 - Drag and drop functionality utilizing jQuery sortable – this will allow the option to easily rearrange menu items at any time.
 - Also leveraging bootstrap grid system in order to be more responsive and optimized for presentation on any device.

E-Prescribe (EPCS) – DEA Mandated Initiative:

- In order to meet new DEA regulations, our physicians – accustomed to years of creating paper prescriptions containing their National Provider Identifier (NPI), DEA Number and signature written and faxed – needed the ability to electronically prescribe controlled substances (EPCS).
- Tasked with creating an effective solution that would be easily adopted, we were aware there would be many complexities to develop, deploy, secure and maintain this web-based application.
- Notable intricacies and technology to ensure compliance with DEA Security Mandates:
 - Script required verification behind a 2FA system.
 - Creating prescription required a hardware measurement exceeding FIPS 201-2.
 - Physicians were given a hardware token that we integrated into our product.
 - The end result required a browser plugin, web and desktop application.
 - Other security mandates required extensive electronic scripts – including having second user involvement in the registration and removal of EPCS privileges to a prescriber. This led to the creation of an audit log report with all EPCS related activity, including logins/logouts. Any manipulation of

prescription data on the database or through the application had to be recorded and backed up on an offsite database.

Software Developer

March 2012 – November 2012

Cirrus ABS

- Developed and maintained ASP.NET websites built under proprietary C# framework.
 - Cirrus ABS had their own MVC written in ASP.NET based platform that I learned and fixed issues with
 - Helped migrate from ASP.NET 2.0 to 3.5
- Gained Expertise navigating and debugging large codebases throughout multiple projects using Visual Studio, SQL Server, and Internet Information Services (IIS).
- Fixed broken invoicing system written in PHP that broke during an upgrading to the marketing site
 - The turnaround time for fixing the issue was less than 4 hours
 - This work opened up new opportunities for a number of contracts with the client

Teaching Assistant

August 2011 – May 2012

IPFW

- Guided and managed the growth of three labs of students – teaching them to program Java applications using object-oriented design principles.

Research student

May 2011 – August 2011

IPFW

- Developed Android applications in a team of four people
- Created the backend data server and integrated the code between group members
- Our results were used to set the groundwork for future mobile development courses and research groups
- Projects and Technical Skills

Other Projects

Twitter Copycat – Ruby on Rails

Went through the Ruby on Rails Tutorial book by Michael Hartt, developing a mock of Twitter.

Library Book Checkout - Java (Android)

Made a system to scan QR codes on books for check-in and checkout and have the smartphone or tablet update the database after scanning the books.

Route Finder – Java

This was a heuristics project that used data provided by OpenStreetMap. It used the A* search algorithm to compute the shortest distance between two intersections.

Education

Purdue University – Fort Wayne, IN

Fall 2008 – Spring 2013

Bachelor of Science in Computer Science

Member of the ACM and the UPE honors society