Nicholaus Lawson

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Objective

To teach the next generation of developers, programmers, and engineers. Through education and work experience, I have a great deal of expertise and knowledge to pass on to aspiring professionals. I am also very passionate about helping others learn and problem solve, it is a very rewarding experience to successfully guide students to finding knowledge and honing their skill set.

Education

Masters of Engineering in Computer Engineering   May 2011 | University of Louisville
Project: Hand/finger recognition using Microsoft Kinect

Graduate Certificate in Network Security   May 2011 | University of Louisville

Bachelors of Science in Computer Engineering and Computer Science May 2010 | University of Louisville

Skills/Abilities

C/C++
C#/VB.net/ASP/MVC
HTML/CSS/PHP/Silverlight
Java/Android
Ruby/Python
MySQL/MSSQL/Oracle
Crystal/MSSQL reports
Visual Studio 05/08/10/12
MS Server 03/08/12
Matlab/R
IBM MQ
Web services/WCF
XML/XSD/WSDL
Git/TFS/SVN
Splunk

Experience

Senior Engineer/Tech Lead | ZirMed | August 2014 – present
· Support, refactor, replace, and re-architect portions of a 10+ year old, high transactional system

· Lead the design\implementation and a small team of engineers on a new product to monitor the status of insurance claims after our submission to payers

· Championed small, team based lunch and learn program that grew to include other departments

· Team SQL expert/DBA/data steward. Responsible for assisting team members and troubleshooting any performance issues before turning to the in house DBA experts.

· Designed and started a 'parallel'/'experimental' line of our main line application to allow for special testing and component rewrite efforts.

· Lead the effort to analyse system performance and began performance enhancements to the system.

· Designed and implemented a new C# based, sql backed, dynamic enterprise grade rules engine. This project was picked up by the architecture team and packaged for the rest of the company to begin using.

· Lead the collection of Tech Leads from the 4 teams that comprised our single product, organized a sprintly tech lead meeting to disseminate information, jointly design new features, and help uncover questions that needed elevation to

managers/directors

- Design\Implement a new logging library to get data about our application out to various, configurable destinations including email, log4net, sql, splunk, std out, and system event
- Composed coding standards and documents design patterns/best practices
- Performed code reviews and completed pull requests for all 4 teams

Adjunct Professor | Sullivan College of Technology and Design |August 2016 – Present

- Participated in department meetings and planning sessions for structuring courses and content
- Created content for 4 different courses over 5 sessions. 'Intro to Programming', 'Databases', 'ASP MVC', and 'Intro to C#'

Senior Software Engineer | PNC Bank – Mortgage Division | October 2012 – August 2014

- Developed XAML pages/controls for Silverlight 4 and 5 and back end server code that utilized Oracle MQ, web services, and database for asynchronous work.
- Redesign\Implement large backend processes to allow for better tractability in a production environment and to clean up the general code base and ensure better flexibility of the service in the future
- Participated in full development life cycle of new projects, including front end and back end development
- Design\Implement new multi-threaded coding patterns for the system that increased speed and reliability
- Design\Implement new database schemas to support better information gathering and reporting of production data
- Established new employee training program allow for self-directed development using an industry accepted training resource, and implemented a "Lunch and Learn" weekly seminar.
- Assisted the division Lead Engineer in constructing coding standards, best practices, code review standards, and code analysis of existing systems after a reorganization of the development teams

Software Engineer | ControlTouch Systems | June 2008 – October 2012

- Developed software using C#/VB6/VB.net/Crystal Reports for human machine interfaces, automated code generation, simulation and emulation, and front end reports.
- Utilized PLC code to develop code for automated systems such as baggage conveyance, automotive assembly line, etc.
- Developed report back end utilizing MS SQL and Windows servers.
- Assisted Senior Software Engineer in developing and implementing a new database scheme, triggers, stored procedures and security for a new generation reporting system that replaced the 10 year old legacy system
- Interfaced with clients and consultants to discuss project requirements, project testing and feasibility, and to troubleshoot live systems.
- Designated lead engineer on site throughout several phases of projects and provided continuity between engineering teams that rotated in and out of field installs.
- Developed and implemented repository policy and SVN repository for software development team

Research assistant | University Of Louisville | Aug 2011 – Aug 2012

- Worked on a Department of Defense project for landmine detection utilizing image recognition through ground penetrating radar images.
- Implemented various feature selection algorithms and image processing features to improve object recognition
- Researched boosting/bagging techniques, such as AdaBoost, for leveraging multiple feature extraction/classification systems
- Prepared data and analysis on the University's progress for national conferences