Eric Johnson | Curriculum Vitae

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Professional Experience

Research Associate/Senior Software Engineer: Institute for Simulation and Training / UCF C#.NET, ColdFusion, and SQL application development.	2002 - Present
Administration of said software	
Entry Level Programmer: Institute for Simulation and Training / UCF Beginning ColdFusion and SQL application development.	2000 - 2002
Education	
Bachelor of Science / Business Administration: University of Central Florida / Orlando, FL.	1999

Emphasis on Management Information Systems

Technologies Used

C#.NET, ColdFusion, SQL, HTML, JavaScript (jQuery, D3), CSS, XML, ReST and SOAP, XSLT, ArcGIS Maps, LDAP, "R" Statistical Software

Development Environments: Visual Studio, Visual Studio Code, R GUI, and SQL Server Enterprise Manager

Cloud: Azure native services - configuration, deployment, and maintenance.

Source Control: Subversion (SVN), GIT

Strengths

Backend and API programming, web services, etc.

Console Applications to solve specific issues - i.e., Active Directory queries/updates, XML document parsing, large dataset imports, etc.

Mindful of XSS (Cross-site scripting) and SQL injection vulnerabilities; interpretation of vulnerability scan reports.

 $Integration \ with \ third-party \ software \ - \ i.e., \ ``DotNetNuke", \ ``R", \ ArcGIS, \ ListServ, \ etc.$

Data importing and manipulation using MSSQL, .csv, Excel, and other sources.

Code administration and deployment; SVN/GIT repo creation/management.

Customer Support of delivered software.

Research and adoption of new technologies to support development efforts.

Notable Projects

VMAP - https://www.vulnerabilitymap.org

- Measures social vulnerability using census data and custom algorithms designed by Dr. Chris Emrich and others. Results are available as custom maps/reports based on userselected regions and can be purchased using the website's shopping cart module. The project is contained within a parent CMS called "DotNetNuke".
- I performed all the .NET and "R" statistical programming and data handling, the geospatial programming via ArcGIS, the integration with the CMS via a custom "module", and the programming of the custom payment gateway with Bank of America.

Hazard Aware - https://www.hazardaware.org

- Provides estimated average annual hazard losses for residential properties using datasets and web services provided by Dr. Chris Emrich, personnel from LSU, ASU, and other entities including FEMA. Address and construction data is provided by Zillow and when merged with the proprietary datasets, allows a property owner to view potential hazard losses by hazard type as visualized in maps, charts, and custom reports.
- I performed most of the .NET programming and data migration, which included appropriation and integration of the Zillow data, webservice consumption, geospatial programming and mapping, and creation of a mitigation calculator to allow property owners to estimate mitigation costs over time.

Redline Rescue - https://redlinerescue.org

- A website resource for fire fighters seeking help for PTSD and other first-responderrelated maladies. The search engine uses a custom ranking algorithm, geospatial data, and other attributes to help users locate Clinicians and/or Peer Support Providers that can provide help for their specific needs. This is the first in a suite of websites aimed at first responders (Blueline for Law Enforcement and Goldline for Dispatchers will be deployed soon).
- I performed most of the .NET programming, which included the search engine backend and ranking logic, geospatial and mapping logic, and logic that drives the custom registration form used by Clinicians and Peer Support Providers. I also imported the data from an earlier version of the website and moved the new website to a cloudbased environment using native Azure services.

Recent Training

Cyber Awareness Challenge - 2/2023

DoD CUI Training - 2/2023