**JOSHUA G. SPANGLER**
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410-663-9525

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| **EDUCATION:**  |

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| **Bachelor of Science - Computer Science**  |
|    | Minor in GeographyCertificate in CartographyGraduation Date: May 1998UMBC - University of Maryland Baltimore County |

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| **SKILLS & KNOWLEDGE:**  |

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| **Primary Skills:**  |
|    | Java, ColdFusion, C#, ASP.Net, MS SQL, MySQL, JavaScript, Typescript, AJAX, HTML, CSS, JSON, XML, Coldspring, Spring Boot, JQuery, Handlebars, Angular, SCRUM/Agile Development Methodology |
| **Secondary Skills:**  |
|    | C, C++, Classic ASP, VBScript, JSP, Perl, PHP, Python, MongoDB |
| **Computer Software:**  |
|    | Microsoft SQL Server 6.5 – 2019 (including clustering), Microsoft IIS 2 – 10Git, GitHub Copilot, Subversion, Microsoft Visual Source SafeAttlassian Suite, IntelliJ IDEA, Eclipse, MavenMicrosoft Office, Microsoft Visio, Microsoft Project, Adobe Photoshop, Adobe Illustrator |
| **Operating Systems:** |
|    | Microsoft DOS - Windows 2019 Server, LINUX, UNIX, Mac |
| **Cloud Platforms:**AWS and Azure**Other Related Technology Systems:**  |
|    | Active Directory, Network Engineering, DNS, SMTP, Certificate Management, SSL, PGP, SSH, FTP, FTPS, Telnet, VMwareI have planned and executed Active Directory upgrades from a Windows 2000 domain to a Windows 2008 R2 domain then to a Windows 2016 domain. |

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| **RELEVANT EXPERIENCE:**  | **Johns Hopkins University**Baltimore, MarylandSr. Software Engineer: September 2010 – PresentI am a Sr. Software Engineer at Johns Hopkins University (JHU) in the Technology Acceleration Group (TAG). I have worked on many projects, ranging from small to large institution level projects using the SCRUM/Agile Development Methodology. My direct team is in charge of several enterprise level projects including the main Johns Hopkins portal for all of Hopkins – both the University and Medical Institutions. I was a key member of the team that migrated the Johns Hopkins portal to a new backend in Azure that is custom built using Spring Boot and Handlebars.I was instrumental in building the messaging platform PING designed to allow clinicians to message each other on their pagers, cell phones (SMS), and Ascom phones from a central secure web-based location. This included integration with Microsoft Lync to display the presence/availability of users on the PING website and backend APIs for other systems to securely send messages through PING. I was invaluable as one of two senior engineers that built an extremely reliable, scalable, and flexible messaging queue based in Java and SQL to send the messages from the PING application. This queue has been repurposed several times within Hopkins for other applications including a version that is still in use as the backend queue for CORUS. I co-developed CORUS which is an evolution of PING, it provides real-time secure HIPAA compliant communications and messaging between individuals and care teams within the Hopkins Medical Institutions. I am one of several team members named on a US Patent that was also granted in France and Germany for technology developed for the CORUS application.I worked to migrate our team’s applications to use Microsoft AD from our previous LDAP provider. I stabilized our environment including our SQL database server, with database restructuring, normalization, and indexing, a custom content cache, server up monitoring for load balancing, and streamlining many of our processes. I built custom monitoring to alert our team to any issues with our applications and servers, and the monitor itself. I typically manage the upgrades of our environments including Windows Servers, ColdFusion, Java, Tomcat, SQL Clusters, Ascom Logging servers, and some of our Cloud environments including AWS and Azure. I co-developed code that manages password updates within Hopkins and monitoring to verify that they update properly in AD and are logged. I assisted in the development of our custom built authentication and authorization tool and continue to work with our team to maintain and upgrade it as it is used across our websites.I took over our custom built Johns Hopkins Emergency Alert system and later implemented Rave Alerting, integrating Rave into our systems for automatic updates when users update their information in the JH portal. I built an application that would show patients their care team on the screen in their hospital room. I worked on the migration from Hopkins’ previous Electronic Medical Record (EMR) system to Epic. I furthered our integration with Epic via its APIs and by building and providing APIs for Epic to call our applications. I maintained and improved our custom Access Request Manager application for managing Epic access. When COVID hit, I very quickly stood up an application so that clinicians could securely send HIPAA compliant messages and links to patients. I also supported Hopkins on numerous other COVID initiatives. I built an application that integrates with the Cisco Jabber system through its APIs using Angular and Spring Boot. I developed custom code for Microsoft Exchange provisioning and group email management. I have been working with our team to rewrite and update our numerous ColdFusion applications to Spring Boot with an Angular front end running in Azure.I have been instrumental in the interview process for new positions and acclimating new hires to our systems, technology, and processes. Throughout my career as a Senior Software Engineer I have mentored multiple Junior Software Engineers and helped them to progress with their skills, abilities, and advancement in their careers.

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| **Educate, Inc. (formerly Sylvan Learning Systems, Inc.)**  |
|    | Baltimore, MarylandLead Programmer/Analyst: May 2001 – September 2010I was the Lead Programmer/Analyst of the Educate, Inc. Enterprise Web Development team. I oversaw the development, documentation, maintenance and standards of over two dozen web sites and applications that receive over 200 million hits a month. I had project management responsibilities and have complete knowledge of all phases of life-cycle development. I prepared detailed technical/functional specifications for new web sites, enhancements, scope changes and maintenance. I created "all-in" estimates for new web sites and projects on a routine basis and have a history of always hitting my estimates and deadlines.I created the architectural design, database design and lead the development of web sites that are multi-lingual and have secure custom web based administration portals. I instructed, directed and checked the work of other programmers on the Enterprise Web Development team, while mentoring junior level programmers. I researched and recommended technical solutions for web server capacity, performance and limitations in a multiple clustered server environment. I evaluated, recommended and introduced new technologies in support of the ever-changing direction of the company business.I kept a wide knowledge through first hand experience and research of current browser trends and browser compatibility issues on multiple platforms. This knowledge began with Mosaic in college, through the browser wars of Netscape & Internet Explorer, continuing to Internet Explorer 8, Firefox and Chrome.I have worked with the SCRUM/Agile Development Methodology as well as the Waterfall methodology at Sylvan. I also maintained the WebTrends server and the Urchin server for web site traffic reporting, and Mods, which is an issue tracking/tasking system that I developed. |
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| **AtomicOZ, Inc.**  |
|    | Baltimore, MarylandPartner, CFO, Lead Developer: August 2001 - December 2002I was the lead developer and CFO for AtomicOZ. This involves the complete analysis, design and development of all projects from initial contact with the client to deployment and maintenance. |
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| **Gr8, Inc.**  |
|    | Baltimore, MarylandTechnical Director: June 1998 - May 2001My experience with Gr8 involved the Technical Direction, Development and Programming of web applications for a multitude of organizations and companies.I was involved in each project for the full term of the project. This ranged from initial contact with the client, to site requirements and site architecture, database and application design, to delivery and maintenance of web applications. |
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| **UMBC Department of Geography - Spatial Analysis Laboratory**  |
|    | Baltimore, MarylandGIS Specialist/Research Assistant: June 1997 - May 1998Created and maintained a web page for UMBC SAL's Tree Troops program.Digitization of forest patch cover in the Gwynns Falls Watershed, Baltimore County and City for the Long-Term Ecological Research (LTER) project.Edited and updated Avenue scripts for ArcView.Handled quality control during the digitization process.Data manipulation in ARC/INFO for the Urban to Rural Index (URI) project.Handled data entry and manipulation in the UMBC General Entry Metadata (GEM) system. |
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| **UNIVERSITY ACTIVITIES:**  |

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| **Member:** Gamma Theta Upsilon Honor Society**Member:** Geography Council of Majors |

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| **PATENT:**  |

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| Tran; Cao-Ly et al. 2022 Systems and methods for messaging patient information in medical system environments. U.S. Patent 11,362,972, filed Jun 5, 2017, and issued June 14, 2022. |

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| **REFERENCES:**  |

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|  Will be furnished upon request |

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