SEAN W. MCGINNIS

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SKILLS

Programming Languages: C#, VB.Net, TSQL, Javascript, Java, C/C++, Lua, HTML, PHP, Scheme, Pascal
Platforms: ASP.Net, Microsoft SQL, MySQL, jQuery, Node.js, Node-RED, Angular.js, Silverlight
Tools: git, Microsoft Visual Studio, Eclipse, SQL Server Management Studio,
Personal: Software architecture design, Agile software development, technical writing, demonstration and presentation, collaboration with stakeholders

EDUCATION

Massachusetts Institute of Technology   *Cambridge, MA*
Masters of Engineering, Bachelor of Science, Computer Science and Electrical Engineering
- Concentration on Artificial Intelligence and Computer Graphics
- Thesis: DAVE, the Distributed Algorithm Visualization Engine, a Java-based application that illustrates the mathematical model of a distributed algorithm's execution

WORK EXPERIENCE

Regal Rexnord   **April 2017 – Dec. 2023**
Senior Software Engineer   *Milwaukee, WI*
- Maintained and extended the message processing back end for Rexnord and Zurn IoT connected products.
  - Solution implemented in IBM Watson Cloud Foundry using Node-RED and Cloudant.
  - Migrated Node-RED Application to Microsoft Azure-hosted application server.
- Maintained, optimized, and extended the capabilities of the rexnord.com CPQ tools for Rexnord gearboxes, chains, and bearings.
  - Implemented on the ConfigureOne CPQ platform and extended using Java, Javascript, and Microsoft SQL.
- Implemented several internal- and external-facing tools using ASP.Net MVC in order to support engineers, estimators, and the sales organization.
  - Designed and implemented SpeedParts, a replacement for a legacy standalone VB 6 estimating application, making it web based and connecting it to SAP for real time estimating
  - Designed and implemented rrx.link, a smart URL shortener customized to provide quick information for Regal Rexnord products.
- Worked as a 100% remote member of a Milwaukee-based team using Agile development methodologies and Microsoft DevOps collaboration tools to be an effective and communicative contributor.

University of Maryland Center for Environmental and Estuarine Studies   **Aug. 2012 – March 2017**
Data Manager   *Cambridge, MD*
- Designed, implemented, and supported a custom web portal for accessing, standardizing, and analyzing environmental data about the Deepwater Horizon disaster.
  - Implemented front end using ASP.Net, jQuery, and Bootstrap.
  - Back end was implemented with Microsoft SQL Server.
  - Assisted researchers with data analysis and standardization, and co-authored journal article about this process.
- Worked with stakeholders to design and implement business office software to manage grant administration and billing processes.
  - Implemented using ASP.Net, jQuery, Bootstrap, and Microsoft SQL Server.

Cambridge International
Senior Software Engineer

Oct. 2007 – Aug. 2012

Cambridge, MD

- Developed custom, web-based configuration tools for Cambridge International products, reducing the time needed to generate a customer quote from hours to minutes (or even while the customer was on the phone).
- Developed a Silverlight-based job shop scheduling tool that increased visibility on order and product details to the job schedulers, while decreasing the time and effort needed to reschedule jobs.
- Customized a Microsoft Dynamics CRM development with custom forms, workflows, and dashboards to increase salesperson visibility on customer contacts, order history, and communication workflows.

ArtisTech Inc.
Lead Research Developer

Feb. 2002 – Oct. 2007

Fairfax, VA

- Worked with Army Research Laboratory scientists on a number of projects, with the goal of transitioning technology from the university laboratory to the field.
- Designed and implemented a Java agent-based system that integrated a variety of machine learning technologies in an autonomous robot demo.
- Managed small teams of developers, presented our research at various conferences, and authored numerous reports and white papers regarding our efforts to the overall research consortium.

PUBLICATIONS

Lessons learned while building the Deepwater Horizon Database

Feb. 1 2016

Computers & Geosciences

PATENTS

Method and Apparatus for Providing Virtual Processing Effects for Wide-Angle Video Images

Oct. 12 2000

International Patent Application WO 00/60853