Shane McGovern

## Introduction

I have over 15 years commercial experience in data and application development spending the last five as a Microsoft SQL Server Database Administrator (dba) within the University of Oregon's College of Education. I love the challenges that tomorrow brings, and have built my career on finding the right technological solutions to them.

## Database Administrator at the University of Oregon

July 2012 - Present

Having been the research units dba during a period of unprecedented international growth, increased competition and broader legislative scrutiny I have always felt challenged and motivated. In both day-to-day monitoring / maintenance and facing specific challenges and projects. Here a few of which I am especially proud:

- **Implement and administer an AlwaysOn availability group.**
  In order to help our partner in Denmark meet stringent national redundancy standards for student data I worked with local government representatives to implement a synchronous-commit, automatic failover AlwaysOn availability group across 4 readable secondary replicas.
- **Secure confidential data with Transparent Data Encryption (TDE) and Force Protocol Encryption (SSL).**
  To meet the expectations of the Federal Educational Rights and Privacy Act I implemented TDE and SSL on 6 SQL Server Enterprise 2014 servers using existing encryption assets.
- **Mirror databases to provide development redundancy.**
  With an aggressive strategy to both maintain the health of our development environment and support partners using pre-SQL Server 2012 infrastructure (and pre-AlwaysOn Availability Groups), I designed and support mirrored databases in high-safety mode with automatic failover. This provides a seamless database development experience to the programming teams.
- **Manage a team of SQL Server developers using Agile.**
  Over a period of 3 years, from 2012 I was proud to lead a team of Reporting Service, Integration Service and Transact-SQL (T-SQL) Developers during a period of increased internal interest in reporting and extract, transform, load (ETL) projects. Our workload was managed using Agile and our work lead to the expansion of our development services and the promotion of team members to individual positions as specialists in those teams.

## Java Developer at the University of Oregon

July 2010 - July 2012

My work as a Java developer began during a period of transition for the development team

behind the organization's core product. A synchronous platform for gathering student disciplinary data built on PHP needed to evolve into an asynchronous application using a Javascript client connecting to the legacy PHP back-end. With commercial experience in software development, my mandate was to help design, build and maintain a product which would serve my research units needs.

- **Implement Version Control and Continuous Integration.**
  Continuous integration goes hand-in-hand with Agile development and with the adoption of Java as a core technology in the organization's stack they needed to move builds off of the desktop and automated by a server. With a background in Java development I introduced Jenkins (originally Hudson) the automated build platform as well as managing change in Apache Subversion, Mercurial SCM and in turn Git.
- **Build a browser-based application in Java using the Google Web Toolkit (GWT).**
  In an exciting 2 year period of immersive Java development I worked with the developers responsible for the original version of two core applications in migrating functionality to GWT. This foreshadowed the building of a 3rd application to complete a suite of student disciplinary referral tools.
- **Lead the optimization of existing (& new) T-SQL.**
  Having used SQL Server 2008 extensively while previously building web applications for the U.S. Senate I was able to realize performance gains for our core applications outside of the Java code by working closely with the existing database administrator. The positive change in resource usage and response times lead to broad changes in how the development teams development against SQL Server.
- **Load and performance test using Apache JMeter.**
  A foreshadow of using Distributed Transaction Coordinator during the implementation of SQL Server 2014 (stability and load testing our existing Data Manipulation Language (DML) code-base) I was able to introduce the concept of performance measurement. Using Apache JMeter to load test functional behavior as part of the continuous integration cycle, I was able to predict the end-user experience of new functionality or changes to functionality before it deployed to production.

**Sole Proprietor / Lead Programmer at my own Limited Liability Company**
July 2007 - July 2010

**I.T. Manager at AZTEC Engineering Inc**
July 2003 - July 2007

**Senior Technical Project Manager at Havas Worldwide Digital (née DIGITAS Europe Ltd)**
July 2000 - July 2003

**Technical Project Manager at Euro RSCG Circle (née Circle.com)**
July 1999 - July 2000

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## Education

I hold a Bachelor's of Science degree in Genetics from the University of Aberystwyth, Wales, UK.

## Links

University of Oregon blog from 2014 - 2015
Personal blog from 2016 - present