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## Summary

A driven .NET developer with experience in a wide range of Microsoft technologies. An enthusiastic high achiever with a passion for continuous learning.

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## Core Technical Skills

**.Net Technologies and Languages:** ADO.NET, ASP.NET, C#, Entity Framework, MVC, SignalR, VB.NET, Web Forms

**Web Technologies and Languages:** AJAX, CSS, HTML, JavaScript, JSON, jQuery, PHP, XML

**Database Management Systems:** Oracle, MySQL, SQL Server

**Development Tools:** Eclipse, SQL Server Management Studio, Team Foundation Server, Visual Studio

**Cloud Services:** Azure Application Insights, Azure App Service, Azure Content Delivery Network, Azure Service Bus, Azure SQL Database

**Operating Systems:** MS Windows, Mac OS X, Linux (Arch, Ubuntu)

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## Experience

- **American Academy of Sleep Medicine**

*Programmer*

**Darien, IL**

*01/2016 – Present*

- Provided ongoing maintenance and developed new features for a telemedicine platform built with ASP.NET Web Forms. This n-tiered application was developed using VB.NET, ADO.NET, SignalR, and WebRTC.
  - \* Integrated Stripe Connect to allow users to accept client payments.
  - \* Created a medical history collection component with a Clinical Document Architecture Release 2 formatted export feature.
  - \* Migrated static content to a CDN.
  - \* Implemented an Azure Service Bus backplane to facilitate seamless application deployment slot swapping without severing SignalR connections.
- Designed and implemented a lightweight version of an existing telemedicine platform with ASP.NET MVC 5 using C#, Entity Framework 6, SignalR, and WebRTC.
- Provided ongoing maintenance for a console based VB.NET application that uses XSLT transformations to convert XML into HTML for both web-based and Kindle publications.

- **Freelance Web Developer**

*Web developer for various clients.*

**Glen Ellyn, IL**

*06/2012 – 06/2014*

- Migrated sites from WordPress.org to shared hosting allowing for deeper customization.
  - Created custom templates for existing static websites transitioning to a CMS (such as Joomla or WordPress).
  - Developed custom WordPress and Joomla plugins.
  - Implemented automated backup processes for existing websites.
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## Education

- **University of Illinois at Springfield**

*M.S. Computer Science (GPA: 4.0 out of 4.0)*

**Springfield, IL**

*08/2013 – 12/2015*

- **Purdue University**

*M.S. Civil Engineering (GPA: 4.0 out of 4.0)*

**West Lafayette, IN**

*08/2003 – 12/2004*

- **Oregon State University**

*B.S. Civil Engineering (GPA: 3.89 out of 4.0)*

**Corvallis, OR**

*09/1998 – 03/2003*

## Project Highlights

- **AASM SleepTM Select** <https://sleepm.com/>  
*ASP.NET 4.5, C#, Entity Framework 6, MS SQL, MVC 5, SignalR, WebRTC* 10/2016 – Present  
A lightweight version of the AASM SleepTM sleep-specific telemedicine platform that focuses on a simplified telemedicine encounter process (launched 04/20/2017).
- **AASM SleepTM Pro** <https://sleepm.com/>  
*ADO.NET, ASP.NET 4.5, MS SQL, SignalR, VB.NET, Web Forms, WebRTC* 1/2016 – Present  
A full featured, HIPAA compliant telemedicine platform developed specifically for sleep doctors.
- **Elavon Converge Payment Gateway for WooCommerce** [jacobmdavidson.com/converge/](http://jacobmdavidson.com/converge/)  
*PHP, WooCommerce, WordPress* 09/2012 – 10/2016  
WordPress plugin that adds a Converge payment gateway to WooCommerce (an eCommerce solution for WordPress).
- **Professional Engineering License Manager** [www.pelicensemanager.com](http://www.pelicensemanager.com)  
*Joomla, MySQL, PHP* 08/2012 – Present  
Membership based web application built on the Joomla content management system that helps engineers manage continuing education requirements for professional engineering licenses.
- **ComputerSMS Android and Desktop Applications** [jacobmdavidson.com/computersms/](http://jacobmdavidson.com/computersms/)  
*Android, Java* 10/2015  
Send and receive SMS text messages through an Android phone using a desktop application connected to the same local area network. Includes multicast DNS to simplify service discovery, XML message passing, and AES-128 message encryption derived from a Diffie-Hellman key exchange.
- **Surveying Coordinate Transformation** [jacobmdavidson.com/coordinate-transformation/](http://jacobmdavidson.com/coordinate-transformation/)  
*C# .NET* 08/2014  
Created for the survey department of Patrick Engineering, Inc., this WPF application transforms survey coordinates from one coordinate system to another using the least squares methodology.
- **SMorSe for Android** [jacobmdavidson.com/smorse/](http://jacobmdavidson.com/smorse/)  
*Android, Java* 07/2014  
Converts incoming SMS text messages to Morse code based on the ITU-R M.1667-1 recommendation, and plays or vibrates the message in accordance with the volume settings of the phone.