

Summary

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

Core Technical Skills

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

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

Database Management Systems: MySQL, MS SQL Server

Development Tools: SQL Server Management Studio, Team Foundation Server, Visual Studio IDE, Visual Studio Code

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

Web Servers: IIS, Apache

Experience

- **American Academy of Sleep Medicine** **Darien, IL**
Programmer *01/2016 – Present*
 - Overhauled a legacy web application dedicated to improving sleep study scoring consistency for sleep technologists resulting in a 30% year-over-year increase in revenue. This ASP.NET Web Forms application was developed using VB.NET, ADO.NET, and MS SQL Server.
 - * Upgraded the administrative dashboard to a customized version of Bootstrap 3.
 - * Developed an internal notification system to reduce reliance on external emails.
 - * Added a pediatric sleep study scoring track and provided access to all AASM archived records.
 - * Migrated from Telerik reporting to jsreports and amCharts for deeper report customization.
 - * Simplified the registration and subscription processes.
 - Designed and implemented a lightweight version of the AASM SleepTM telemedicine platform with ASP.NET MVC 5 using C#, Entity Framework 6, SignalR, MS SQL Server, and WebRTC.
 - Developed Android and iOS applications that integrate with the AASM SleepTM telemedicine platform using Xamarin.Android, Xamarin.iOS, SignalR, and WebRTC.
 - Provided ongoing maintenance and developed new features for the professional version of the AASM SleepTM telemedicine platform built with ASP.NET Web Forms. This n-tiered application was created using VB.NET, ADO.NET, MS SQL Server, 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.
 - * Developed an availability calendar module that allows patients to schedule appointments from staff selected availability.
 - * Launched a service that connects patients with board-certified sleep medicine physicians via telemedicine.
 - * Improved algorithm efficiency on several data intensive pages reducing load times by up to 90%.
 - Provided updates and ongoing maintenance for several web and mobile applications, including foundation.aasm.org, jcsa.aasm.org, wellness.welltrinsic.com, sleepmeeting.org, AASM Resource Library iOS and Android mobile apps, I See the Animals Sleeping Android mobile app, and The Animals Sleep Android mobile app.
 - **Freelance Web Developer** **Glen Ellyn, IL**
Web developer for various clients *06/2012 – 06/2014*
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Education

- **University of Illinois at Springfield** **Springfield, IL**
M.S. Computer Science (GPA: 4.0 out of 4.0) *08/2013 – 12/2015*
- **Purdue University** **West Lafayette, IN**
M.S. Civil Engineering (GPA: 4.0 out of 4.0) *08/2003 – 12/2004*
- **Oregon State University** **Corvallis, OR**
B.S. Civil Engineering (GPA: 3.89 out of 4.0) *09/1998 – 03/2003*

Project Highlights

- **Welltrinsic Wellness Program** **wellness.welltrinsic.com**
ADO.NET, Angular, .NET Core 2.0, MS SQL Server, MVC, Web API, Xamarin Forms *06/2019–Present*
The Welltrinsic Sleep Wellness Program provides employers the opportunity to offer their employees the tools and resources needed to become masters of their own sleep patterns, achieve better sleep, and unlock their full potential.
- **Sleep ISR** **isr.aasm.org**
ADO.NET, ASP.NET 4.0, MS SQL Server, VB.NET, Web Forms *05/2018–Present*
A web application dedicated to improving sleep study scoring consistency for sleep technologists (upgrade launched: 09/04/2018).
- **AASM Sleep™ Android App** **play.google.com/store/apps/details?id=com.aasm.sleepm**
Xamarin.Android, C#, SignalR, WebRTC *08/2017–Present*
An Android application that integrates with the AASM Sleep™ telemedicine platform allowing patients to engage in telemedicine encounters using an Android device (launched: 09/11/2017).
- **AASM Sleep™ iOS App** **itunes.apple.com/us/app/aasm-sleepm/id1253586517?mt=8**
Xamarin.iOS, C#, SignalR, WebRTC *04/2017 – Present*
An iOS application that integrates with the AASM Sleep™ telemedicine platform allowing patients to engage in telemedicine encounters using an iOS device (launched: 07/31/2017).
- **AASM Sleep™ Select** **sleepm.com**
ASP.NET 4.5, Azure, C#, Entity Framework 6, MS SQL Server, MVC5, SignalR, WebRTC *10/2016–Present*
A lightweight version of the AASM Sleep™ sleep-specific telemedicine platform that focuses on a simplified telemedicine encounter process (launched: 04/20/2017).
- **AASM Sleep™ Pro** **sleepm.com**
ADO.NET, ASP.NET 4.5, Azure, MS SQL Server, SignalR, VB.NET, Web Forms, WebRTC *01/2016–Present*
A full featured, HIPAA compliant telemedicine platform developed specifically for sleep doctors.
- **AASM Sleep™ Intranet** **sleepm-intranet.azurewebsites.net**
ADO.NET, ASP.NET 4.5, Azure, MS SQL Server, VB.NET, Web Forms *01/2016–Present*
Administrative portal for usage report generation, and for managing AASM Sleep™ users, accounts, and subscriptions.
- **AASM Resource Library Mobile App** **https://play.google.com/store/apps/details?id=com.aasmnet.resourcelibrary**
Android, Java, ASP.NET Web Services, MS SQL Server, VB.NET *01/2016–Present*
A native Android application that gives clients access to purchased electronic publications on their mobile device.
- **Journal of Clinical Sleep Medicine** **jcsm.aasm.org**
ADO.NET, ASP.NET 4.0, MS SQL Server, VB.NET, Web Forms *01/2016–Present*
A monthly online journal publication with more than 9000 subscribers.
- **Professional Engineering License Manager** **jacobmdavidson.com/pelicensemanager/**
Joomla, MySQL, PHP *08/2012–02/2018*
Membership based web application built on the Joomla content management system that helps engineers manage continuing education requirements for professional engineering licenses.
- **Surveying Coordinate Transformation** **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/**
Android, Java *07/2014*
Converts incoming SMS text messages to Morse code based on the ITU-RM.1667-1 recommendation and plays or vibrates the message in accordance with the volume settings of the phone.