2s473 Bancroft Ct.
Glen Ellyn, IL 60137

Jacob M. Davidson

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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.

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, 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)

Experience

- **American Academy of Sleep Medicine**   **Darien, IL**
  Programmer   *01/2016 – Present*
  - 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, 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 the AASM SleepTM telemedicine platform with ASP.NET MVC 5 using C#, Entity Framework 6, SignalR, 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 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**   **Glen Ellyn, IL**
  Web developer for various clients.   *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.

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*

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Project Highlights

- **AASM SleepTM Android App**   play.google.com/store/apps/details?id=com.aasm.sleeptm
  Xamarin.Android, C#, SignalR, WebRTC — *08/2017 – Present*

  An Android application that integrates with the AASM SleepTM telemedicine platform allowing patients to engage in telemedicine encounters using an Android device (launched: 09/11/2017).

- **AASM SleepTM iOS App**   itunes.apple.com/us/app/aasm-sleeptm/id1253586517?mt=8
  Xamarin.iOS, C#, SignalR, WebRTC — *04/2017 – Present*

  An iOS application that integrates with the AASM SleepTM telemedicine platform allowing patients to engage in telemedicine encounters using an iOS device (launched: 07/31/2017).

- **AASM SleepTM Select**   sleeptm.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**   sleeptm.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/
  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
  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/
  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/
  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-R M.1667-1 recommendation, and plays or vibrates the message in accordance with the volume settings of the phone.