# Jim Espaillat Senior .Net Developer/Architect

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**Senior software architect, developer, and database designer with extensive experience in the Microsoft development ecosystem. Proficient at creating both comprehensive architectural solutions, and detailed tactical implementations.**

# **Professional Experience**

BNP Paribas Senior .NET Developer

Jersey City, NJ Jan 2024 – Present

Converted a microservice-based repo settlement system, from .NET 4.8/WCF, to a .NET Core 8 API with Angular 14 and gRPC. Implemented inter-service messaging using Kafka. Database queries were written using Dapper against a SQL Server 2019 database.

Alphathena Database Architect

Chicago, IL (Remote) Nov 2023 – Dec 2023

Designed and implemented an AWS/MariaDB database for a fintech startup. Designed ETL processes to handle account data and FIX order transmissions to and from brokerages.

Bloomberg Senior .NET Developer

New York, NY (Remote) Jun 2022 – Jun 2023

Performed numerous enhancements on an employee compensation system, written using C#, .NET, Angular 11, and PostgreSQL. System consists of three primary components: a C# WebAPI application to handle complex business rules regarding user data access permissions, a separate C# WebAPI application hosting the primary business logic, in addition to an Angular 11/Node.js front end. Converted several batch applications, originally written with .NET Framework and Entity Framework, to .NET Core 6 and EF Core running on Linux. Modified several supporting programs written in Python.

Summit Rock Advisors Senior .NET Developer

New York, NY (Remote) Nov 2021 – Jun 2022

Performed maintenance and enhancements on a portfolio management application, written in C# and .NET Core and implemented as a hybrid of WinForms and WPF, using SQL Server 2017. Converted database operations from Entity Framework 5 to EF Core.

SES Satellites Senior .NET Developer

Princeton, NJ (Remote) Jan 2021 – Nov 2021

Developed a satellite and ground station monitoring system. Written in C# and .NET Core, with a Blazor UI, the system incorporates real-time telemetry data sourced from both Kafka and Azure DataLake, which is then propagated to the browser using gRPC streams. Interface elements were built using various Blazor (DevExpress, Radzen) and JavaScript (LightningChart, goJS, Cesium) components. Entity Framework Core was used to connect to both SQL Server and PostgreSQL databases.

National Basketball Association .NET Technical Lead

Secaucus, NJ Nov 2019 – Jun 2020

Oversaw a team of five offshore developers in developing an application to manage security preparations for upcoming events. The application was written in C# and ASP.NET Core MVC, and used Entity Framework to interact with a SQL Server 2014 database.

Corbin Capital Partners Senior .NET Developer

New York, NY Feb 2019 – Nov 2019

Performed maintenance on portfolio and risk management applications, written in C# and ASP.NET MVC, and implemented as single-page applications using Angular and WebAPI, and interfacing with WCF services. Used SignalR to apply real-time updates from Bloomberg Terminal API. Applied refactoring and performance improvements to numerous SQL Server stored procedures. Wrote SQLCLR procedures to invoke R libraries from within the database.

Solely responsible for design and implementation of a new DevOps environment, consisting principally of TeamCity, Bitbucket (Git), and Jira. Migrated production database from SQL Server 2008 to 2017. Created process, integrating Git, TeamCity, and PowerShell, to not only perform continuous integration/deployment of source code, but to also synchronize production and test/dev databases with their respective release branches.

U-Swirl Senior .NET Developer

Durango, CO (Remote) Jan 2018 – Oct 2018

Designed and developed a cross-platform mobile restaurant inventory system using .NET and Xamarin.Forms. Data entry applications were written to operate on both Android and iOS mobile devices using Azure offline sync features, with reporting and analysis functions written as a Windows desktop application. Microsoft SQL Server database was designed as a multi-tenant system on Microsoft Azure, exposed as a REST OData service using WebAPI, with third-party authentication provided by Auth0.

BioReference Laboratories Senior .NET Developer

Elmwood Park, NJ Jul 2015 – Aug 2017

Performed extensive refactoring and maintenance on several business-critical application systems. Applications were written using a variety of tools, notably ASP.NET and both C# and VB.NET, using a Microsoft SQL Server 2012 database.

Designed and wrote a new WebAPI interface for the internal order update subsystem. Performed maintenance on an Angular/WebAPI application to monitor order message traffic to the company’s billing system. Responsible for enhancements which included use of the Confluence REST API to store and retrieve documents, front-end integration with Tableau Server, and use of Ghostscript utilities to convert images to and from PDF.

Responsible for setting up Git/Stash and TeamCity in a new continuous integration server configuration, and automating deployment to QA and Production environments.

PwC (formerly Booz & Co) Senior .NET Developer

New York, NY (Remote) Aug 2013 – Jan 2015

Designed and developed a single-page application website for internal use as part of the Fit for Growth product offering, to analyze and optimize proposed corporate restructurings being undertaken by Booz’s own clients. The data-centric application was written using ASP.NET and MVC 5/Razor, against a Microsoft SQL Server 2012 database, and was designed to make heavy use of JavaScript/jQuery and Knockout.js client-side view models to provide a responsive user interface. The application leverages Tableau Server software to provide enhanced data visualizations on the front end, and interfaces with the FICO Xpress optimization engine to provide cost-effective solutions to clients. Entity Framework 5 was used to manage interactions with the database.

Completely redesigned the previous versions of both the application and the database, to effect not only a sizable reduction in the amount of data being processed, but also a resulting significant improvement in performance and reduction in the technical debt attributable to the original design.

American Society of Mechanical Engineers Senior .NET Developer

New York, NY Jul 2012 – Aug 2013

Designed and developed a number of internal- and external-facing websites, using ASP.NET and MVC 4, against a Microsoft SQL Server 2008 database. JavaScript, AJAX and jQuery features were used extensively to optimize the user experience.

Redesigned the single sign-on system (including front-end interface, web services, and database schema) used by most of the association’s public websites to improve data quality and allow for more flexible user registration.

OneWorld, Inc. .NET Architect / Senior Developer / Database Administrator

Parsippany, NJ Sep 2007 – May 2012

Created CLD, a platform for delivering pharmaceutical marketing content to health care providers at conventions, collecting provider data, and interfacing with clients’ CRM systems. Written in .NET, the system comprises multiple applications, all of the following which I personally designed and developed:

* A VB/C#/SQL Compact front end which serves as the engine for dynamically displaying graphic content (both static and Flash images) based on custom configuration files, collecting data from physical card scans, and formatting data for transmission to a WCF service
* Numerous SQL Server stored procedures used to configure the front end
* A set of SSIS packages used to import client customer data into the primary SQL Server database
* A number of C# and VB desktop applications used internally for scheduling and reporting

Created DataVault, a CRM-like system for tracking the activities of individual health care providers across multiple clients and conventions. The system uses sophisticated algorithms written in .NET and deployed to SQL Server using SQLCLR, to standardize and match identifying information from various data sources, and hence of varying quality, along several dimensions (names, addresses, degrees, specialties, etc.) simultaneously.

Served as development DBA supporting all OneWorld applications. Responsible for designing and maintaining table schemas, and enforcing coding standards for stored procedures. Used PowerDesigner to create and maintain E/R diagrams, and to generate change scripts as needed. Provided performance tuning and debugging support to other developers.

Unilever (formerly Best Foods) .NET Technical Lead

Englewood Cliffs, NJ May 2006 – Aug 2007

With a team of four developers, designed and developed a commission system to calculate payments to brokers. Application consists of an ASP.NET front end, written in C#, with business logic deployed as Transact-SQL stored procedures in a SQL Server 2005 database. Primarily responsible for overall application design and data modeling, as well as implementing most of the back-end business rules. Implemented numerous reports using SQL Server Reporting Services (SSRS).

NYC Human Resources Administration .NET Developer

New York, NY Mar 2006 – May 2006

Converted Distributed PowerBuilder components to.NET components deployed on a COM server, and running against an Oracle 9i database. Used Sybase DataWindow.NET to leverage business rules embedded in legacy code.

# **Formal Education**

University of Pennsylvania Philadelphia, PA

Bachelor of Arts in Biology Benjamin Franklin Scholars/General Honors Program