

# David R. Marrero

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## Details

- Current Position: Freelance Developer & Consultant
- Visa Status: U.S. Citizen
- Availability: Immediate
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## Profile

I have leveraged my experience by leading development teams in multiple industries, including the creation of enterprise applications for manufacturing and government clients. Recent work has been focused on implementing microservices with .Net 9, Azure, SQL Server and Blazor. I have worked in .Net Core and Azure for ten years, having successfully delivered innovative solutions using orchestration, Azure functions, container apps, data factory pipelines and continuous integration (CI/CD). I have also created and continued to manage .Net and Blazor projects using VPS Linux environments. My various roles have included project manager, lead developer, consultant, IT manager, architect, and mentor. I believe in standards-driven development, customer-focused requirements and a service philosophy. I have taught IT courses at Ivy Tech Community College for twelve years.

## Strengths

Problem-solving, communication, collaboration, mentoring, visioning, planning, database design and development (including Azure), .Net Core architecture, web, API and microservice development, technical writing and documentation, end-to-end testing (Playwright), and project-task-risk management.

## Summary

- Senior Software Engineer with over 20 years of experience within diverse industries, specializes in implementing microservices using .NET 9, Web APIs, SQL Server, Blazor and Razor.
- Problem-solving, communication, collaboration, mentoring, visioning, planning, database design and development (including Azure), .Net Core architecture, web and API development, technical writing and documentation, and project-task-risk management.
- Experienced in leading development teams and architecting robust solutions using cutting-edge technologies such as .NET development, azure cloud services, SQL Server database design, and modern web technologies including Blazor and Web API.
- Experienced in building microservices and related technologies such as API's, Azure Functions, Azure Container Apps, orchestration, and hybrid cache
- Certified Microsoft Azure Data Engineer Associate (DP-203) and Azure Data Fundamentals (DP-900), demonstrating deep knowledge in Azure cloud technologies and data engineering principles.
- Extensive hands-on experience with dynamic web applications using Blazor and Razor components.
- Experience in designing and optimizing SQL Server databases for application scalability and introducing Blazor components to enhance user interfaces.
- Proven expertise in designing scalable solutions, optimizing data workflows, and ensuring robust application performance in cloud environments.
- Experience leveraging MSSQL database design, development, performance optimization, and scalability. Proficient in integrating MSSQL with Azure services such as Azure Functions, Container Apps, Azure Storage and Azure Data Factory (ADF).
- Designed and implemented a jQuery-based web application hosted on SharePoint, incorporating custom-built SOAP data components to interface with MSSQL databases effectively.
- Specialized in delivering innovative solutions using Azure Functions, Logic Apps, Data Factory pipelines, and implementing CI/CD pipelines.
- Manage .NET and Blazor projects in VPS Linux environments with diverse roles including project manager, lead developer, consultant, IT manager, architect, and mentor.
- Provided technical leadership and guided the development team in best practices and architectural standards.

## Core skills

- .Net Core, C#, Blazor, MVC, Web API, SQL Server, T-SQL, LINQ, Azure, Docker, AJAX, Entity Framework, jQuery/JavaScript, JSON/XML, and Knockout.js.
- Working knowledge of MongoDB, Python, React, Linux and Nginx.

## Skills

- **Soft Skills:** problem-solving, communication, collaboration, mentoring, visioning, planning, technical writing, documentation, project-task-risk, management, instructor, mentor, project lead
- **IDE and Applications:** Visual Studio, Visual Code, Postman, SQL Server, GIT, PowerShell, Swagger, Jira, Click-Up, DevOps, SSMS, SSIS, Visio, Word, Excel, Access
- **Database Skills:** SQL Server (MSSQL), T-SQL, database design, stored procedures, triggers, functions, mySQL, Entity Framework, LINQ, localization.
- **Azure Skills:** Azure web services, functions, container apps, logic apps, storage, queues, B2C, custom policies, Graph API, CI/CD
- **Front-End Development and Scripting:** JavaScript, jQuery, Blazor, AJAX, Knockout, XML, JSON, ORM, Razor
- HTML5, CSS3, XSLT, Bootstrap, Mud Blazor, SyncFusion.
- **Coding and Middleware Development:** .Net Core (8-9), ASP.Net, C#, MVC, Web API, Minimal API's, microservices, OOP, LINQ, Dependency Injection, hybrid cache, development patterns, XUnit, Automated Testing, localization, orchestration, containerization.
- **Security :** Identity Server 4, Azure B2C, home-grown authentication and authorization services, OAuth
- **Planning and Management:** Project management, consulting, stakeholder management, gathering requirements, SDLC, domain-driven design, Agile, Jira, UML, diagramming, technical writing, documentation.

## Education

- MPA (Master of Public Affairs) from Indiana University, Bloomington, Indiana
- BA, Pol. Sci. & Afro-American Affairs from Indiana University, Bloomington, Indiana

## Certifications

- PMI Certified Associate: Project Management (CAPM) – 2024
- Microsoft Azure Data Engineer Associate (DP-203) – 2023
- Microsoft Azure Data Fundamentals (DP-900) – 2022
- Microsoft Azure Fundamental/Administrator (AZ-900, AZ-104) – 2022
- Microsoft Certified IT Professional (DB Developer 2008) – 2014
- Microsoft Certified Solutions Expert (MCSE: Data Platform) – 2014
- Microsoft Certified Solutions Associate (MCSA – SQL Server 2012) - 2014
- CompTIA Security+ Certification (2009, 2015, 2018)
- MS Cert. Tech Spec/Pro Developer (MCTS/MCPD .Net Web Development) – 2008
- Microsoft Certified Solution/Application Developer (MCAD/MCSD) – 2003-2008

## Experience:

### Lelander

St. Louis, Missouri (Contract – Remote); Oct 2024 – present

Sr. Software Engineer

#### **Responsibilities:**

- Implemented microservices (.Net 9, Azure, MSSQL, Azure functions) for selected needs
- Built Playwright End-to-End UI testing app (Blazor, node.js, Docker, Azure container app)
- Performed database updates and maintenance as needed
- Participated in Agile development processes, including sprint planning and weekly stand-ups

### Paradigm Software

Cockeysville, Maryland (Full time – Remote); Oct 2024 – Jun 2025

Sr. Software Engineer

#### **Responsibilities:**

- Researched and prototyped new and advanced initiatives such as Power BI, orchestration, hybrid cache, centralized logging with writer-reader channels, Indexed DB (WASM), SEQ logging, and Azure container apps (.Net 9)
- Prepared research reports and diagrams related to new initiatives
- Performed Blazor client coding as needed
- Participated in Agile development processes, including sprint planning, daily stand-ups, retrospectives, demos and code reviews

### Walker Health Force (Humana Military)

Louisville, Kentucky (Fulltime - Remote); Mar 2024 – Aug 2024

Sr Azure Engineer

#### **Responsibilities:**

- Implemented customized Azure B2C UI for authentication, Graph API and custom authentication policies.
- Researched and adapted architecture to support .NET 8 migration.
- **Prototyped and tested new application components to ensure reliability and performance in a microservices environment.**
- **Developed microservices using .NET 8, including Web APIs and Azure Functions.**
- Participated in Agile development processes, including sprint planning, daily stand-ups, and retrospectives, to deliver timely and high-quality solutions.
- Collaborated with cross-functional teams to integrate Azure solutions into existing infrastructure.

### State of Courts of Indiana

Indianapolis, Indiana (Fulltime - Remote); Oct 2023 - Feb 2024

Sr Software Engineer

#### **Responsibilities:**

- Assisted with modernization of the state court information system by integrating SQL Server databases, Azure Functions, and Blazor UI.
- Developed localization strategies to manage court records seamlessly across multiple languages.
- Designed and implemented a scalable architecture to localize database content and user interfaces.
- Configured SQL Server 2019 to support multiple API and UI endpoints for over 700 courts statewide.
- Leveraged .NET 8 and Web API technologies to enhance functionality and interoperability.
- Collaborated with stakeholders to prioritize feature development and align with project goals and timelines.
- Provided technical leadership to development team in best practices and architectural standards.

### Soltech - Client: QHR

Atlanta, Georgia (Fulltime - Remote) ; Aug 2022 – Feb 2023

Sr. Software Engineer

#### **Responsibilities:**

- Implemented healthcare insurance systems with X12 HIPPA EDI claims processing.
- **Utilized Jira, MSSQL, C#, LINQ, Azure Functions, Logic Apps, and Azure Data Factory (ADF).**
- Led the overhaul of a complex Azure Logic App by implementing a set of Azure Functions.
- **Implemented App Insights and database tracking for performance metrics, success rates, etc.**
- **Assisted in QHR' s upgrade to .NET 8, focusing on enhancing system reliability and performance.**
- Engineered a distributed architecture by replacing a failing Logic App with multiple Azure Functions and implementing Azure Data Factory pipelines.
- Designed Azure Functions responsible for processing thousands of medical insurance claims daily, interfacing with the EDI portal for status updates.
- Managed queued responses and orchestrated database updates based on processed claims data.

### XLR8R Technologies

Spencer, Indiana (Parttime - Freelance Contract); Jan 2016 - Dec 2023

Consultant/Developer

#### **Responsibilities:**

- Led development and served as architect and database designer for automotive repair industry client.
- Developed .Net (Ver 3-8) MVC / C# Blazor / Knockout applications for shop management, product catalogs, invoicing, inventory, and repair orders.
- Leveraged MSSQL for DB design and Azure services (Azure Storage, Azure Functions, CI/CD).
- Played pivotal role in designing scalable, efficient solutions tailored to the automotive repair sector
- Collaborated closely with stakeholders to ensure alignment with project objectives and timelines.

### SAIC - Crane Naval Warfare Center (NSWC)

Crane, Indiana (Fulltime, Hybrid); Jan 2009 - Jul 2022

Sr. Software Engineer

#### **Responsibilities:**

- Led development and served as lead developer for application architecture, SQL Server design & development, C#, .Net Web API development, and jQuery front-end development.
- Designed and built the OPS Center (OC), a project-task-risk management application.
- Developed OC as a jQuery-based web app hosted on SharePoint, utilizing a custom-built SOAP data component (XDAC) to interface with on-premise MSSQL.
- Implemented and managed internal access controls within OC, using nine permission levels
- Collaborated with stakeholders and end-users to gather requirements and ensure project alignment.
- Implemented robust error handling and logging mechanisms in the OPS Center application to enhance stability and facilitate troubleshooting.
- Conducted performance optimization and scalability enhancements for MSSQL databases to support increasing data volumes and user loads.
- Provided technical mentorship and guidance to junior developers, fostering team development.
- Participated in Agile methodologies, including sprint planning, daily stand-ups, and retrospectives, to ensure iterative delivery and continuous improvement.
- Engaged in code reviews and QA activities to maintain high standards of code integrity and software quality.
- Stayed abreast of industry best practices and emerging technologies, applying them to enhance the functionality and performance of the OPS Center application.

## Projects

### **Playwright End-to-End UI Testing App (Paradigm)**

**Dec 2024 – Jun 2025**

- Multiple orchestration prototypes built and tested, including Ocelot, YARP and DIY version
- DIY version was created because Ocelot and YARP have weak capabilities for advanced sub-domain routing
- DIY version was very successful at sub-domain routing and included the ability to route based on version and role requirements per endpoint

### **Playwright End-to-End UI Testing App (Lelander)**

**Dec 2024 – Jun 2025**

- Blazor front-end application used to implement a database rules engine to select and execute selected UI tests
- Large set of tests available, which could be selected individually or in groups
- Playwright functionality implemented in an Azure container app using node.js
- Results reporting by test and individual test steps, with screenshots

### **CIAM Project (Walker Health)**

**Apr 2024 – August 2024**

- Azure B2C, custom policies, Graph API, Azure functions to upgrade user authentication and authorization.
- Created and modified custom policies to control specialized sign in and sign on processes.
- Implemented Azure functions to support B2C logic and logging

### **State Courts of Indiana Record Management**

**Oct 2023 - Feb 2024**

- MSSQL database, Minimal API's, Azure functions, localization, Blazor development to upgrade management of court-related records.
- Created complex database structure and Blazor UI to maintain localized content across hundreds of courts and case filing types.

### **XLR8R Material Manager**

**Aug 2015 - Oct 2023**

- Lead architect, designer and developer. .Net MVC, API, MSSQL and Knockout.js system serving multiple automotive distributors and over 300 repair shops to manage repair orders, purchase orders, inventory control, product catalog management, automated ordering, etc.

### **Medical Claims Status Updates**

**Aug 2022 - Jan 2023**

- Created Azure functions, logic apps, azure storage, Blazor UI, and complex database structures to identify, submit, receive and track hospital medical claims using EDI and industry insurance portals.

### **OPS Center**

**Apr 2009 - Aug 2022**

- Lead architect, developer, mentor, database and web designer for project-task-risk-custom reporting application for 30 divisions at Crane Navy Warfare Center (Crane, Indiana).
- Project was built using MSSQL, .Net APIs, and jQuery/AJAX-based UI over SharePoint, with nine levels of permissions, and integrations with Microsoft Project.