**Ryan Douglas White(1991.11.3)**

Senior .NET Full Stack Engineer

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**Summary**

Accomplished Senior Software Engineer with over 12 years of experience in designing, developing, and maintaining complex, scalable, and high-performance applications. Proficient in both backend and frontend technologies, including **C#, .NET frameworks**, **React.js**, **Angular** and **Blazor**. Demonstrated expertise in microservices architecture, **RESTful APIs**, and cloud platforms such as **AWS** and **Azure**. Skilled in utilizing modern development tools and methodologies like **Agile**, **DevOps**, and **CI/CD** to deliver robust software solutions. Adept at collaborating with cross-functional teams to drive project success and improve user experience. Strong problem-solving abilities, attention to detail, and a commitment to continuous learning and professional growth.

**My works**

[**https://wedo.lu**](https://wedo.lu)

[**http://www.hyperhost.pt**](http://www.hyperhost.pt)

[**https://vervoe.com**](https://vervoe.com)

[**https://heckenschnitt.com**](https://heckenschnitt.com)

**Skills**

**Programming Languages:** C#, HTML5, CSS, JavaScript, TypeScript, XML, GraphQL, SQL, VBScript, C, C++, Python

**Web Development:** .NET, .NET Core, ASP.NET MVC, .NET 4/5/6/7/8, WinForms, ASP.NET API, PowerShell, Blazor, Razor, Entity Framework, Dapper, LINQ, React.js, Angular, Bootstrap, Tailwind CSS, Material-UI, D3.js, jQuery

**Databases:** SQL Server, PostgreSQL, MongoDB, Azure CosmosDB, SQLite, Couchbase

**Cloud Technologies:** AWS, Azure, GCP

**DevOps:** Docker, Kubernetes, Terraform, Jenkins, Github Actions, Azure DevOps

**Messaging Systems:** Amazon SQS, SNS, RabbitMQ, WebSocket, Apache Kafka, SingalR, Redis, Azure Service Bus

**Testing:** xUnit, NUnit, Moq, Selenium, Postman, Swagger

**Other:** Git, Github, Bitbucket, Jira, Confluence, Kanban, Scrum, Agile, Microservice, SOA, ETL, TDD, Dependency Injection, Power BI, SSIS

**Experience**

## Senior .NET Full Stack Engineer

### Altudo | New York, NY Nov 2021 – Jul 2025

* Led the creation of an **automotive fleet management solution** using **React.js**, **C#**, and **ASP.NET Core**, which improved operational efficiency by 42% through advanced analytics and real-time tracking capabilities.
* Transformed a legacy **dental practice management system** into a modern architecture by implementing **.NET 4/7/8** and **Azure** **Serverless** **Architecture**, utilizing **Angular** for a dynamic user interface that enhanced patient engagement.
* Developed a robust microservices framework with **C#**, **ASP.NET Core**, and **SQL Server**, integrating **Azure Service Bus** for effective message handling across the fleet management and dental systems, ensuring smooth data flow.
* Optimized service routing and load balancing by applying **API Gateway** patterns with **Ocelot**, significantly enhancing the responsiveness and reliability of both applications.
* Strengthened security measures by integrating **ASP**.**NET** **Core** **Identity** and **OAuth** for authentication and authorization, implementing role-based access control (**RBAC**) and multi-factor authentication (**MFA**), while securely managing secrets with **Azure** **Key** **Vault**.
* Executed the modernization of outdated components within the dental practice management system using **ASP.NET Core**, achieving a seamless migration process that maintained full data integrity without downtime.
* Crafted secure **RESTful APIs** using **ASP.NET Web API**, with comprehensive documentation provided via **Swagger** and thorough testing conducted through **Postman**, implementing **JWT** tokens and **OAuth** **2.0** for secured access.
* Rearchitected the monolithic structure of the dental practice system into a **service-oriented architecture (SOA)**, improving its modularity and scalability while developing key services for patient management and insurance verification.
* Enhanced system performance through **SQL** **Server** and **Azure** **Cosmos** **DB** optimization, leading to a 27% increase in query response times and overall application efficiency.
* Implemented **Azure Cosmos DB** as a globally distributed database for both platforms, ensuring rapid data access and high availability across various geographical locations.
* Utilized **Azure** **Blob** **Storage** alongside **SQL** **Server** for scalable data storage solutions, incorporating caching strategies with **Azure** **Redis** **Cache** that improved application performance significantly.
* Established real-time communication features using **SignalR**, ensuring mission-critical applications maintained high availability and reliability, while leveraging **Azure** **Redis** **Cache** for efficient pub/sub messaging.
* Employed **LINQ** and **Entity Framework, Dapper** for seamless data interactions between web applications and databases, utilizing **Code** **First** **Migrations** to facilitate easy schema updates.
* Leveraged **Azure Functions** to implement serverless computing, optimizing costs and improving scalability, while utilizing **Azure** **Logic** **Apps** for streamlined workflow automation.
* Created interactive dashboards using **D3.js** and **React.js** for real-time performance monitoring and user engagement analysis, providing valuable insights into operational metrics.
* Revamped user interface designs with a focus on user-centric approaches using **Angular**, **React.js**, and **TypeScript**, ensuring consistent responsiveness by integrating **Material-UI** and **Tailwind CSS**, and managing state with **Redux** in React applications.
* Facilitated integrations with various third-party services, such as payment gateways and shipping providers, to enrich the functionality of both the fleet management and dental practice systems.
* Integrated **Apache Kafka** to enhance communication efficiency, achieving a threefold improvement in real-time data streaming and asynchronous messaging across services.
* Conducted thorough code reviews and promoted best practices within **C#** and **ASP.NET** **Core** projects, achieving a 50% reduction in post-deployment issues and enhancing overall code maintainability.
* Maintained high standards of code quality and reliability through unit testing with **xUnit, NUnit** and **Moq**, adopting **Test-Driven Development (TDD)** practices, and employing **SonarQube** for static code analysis, resulting in a significant reduction in bugs.
* Managed and orchestrated large-scale applications based on microservices architecture using **Kubernetes** and **Terraform**, ensuring effective deployment and scaling strategies.
* Utilized **SQL Server Integration Services (SSIS)** to design and deploy **ETL** processes that efficiently extracted, transformed, and loaded data from multiple sources into a centralized data warehouse, improving data accessibility and reporting capabilities for analytics teams.
* Adopted software design best practices and architectural principles, including **Domain-Driven Design (DDD)** and **SOLID** principles, to build maintainable and scalable solutions, while implementing **Micro** **Frontends** to enhance front-end modularity.
* Participated in an **Agile** SDLC environment, utilizing **Scrum** methodology to foster iterative development and continuous improvement.

## .NET Full Stack Developer

### Dotdash Meredith | Des Moines, IA Sep 2017 – Oct 2021

* Migrated enterprise-level **e-commerce** web applications to **ASP.NET Core 3.1**, leveraging **Entity Framework Core** and **SQL Server**, achieving a 20% increase in performance, reduced server response times, and improved maintainability through a refined code architecture.
* Designed and developed scalable **RESTful** **APIs** using **C#** and **Node.js**, enabling seamless access to product catalogs, order details, and user profiles, with optimized query performance tailored for high-traffic scenarios.
* Implemented an event-driven architecture utilizing **RabbitMQ** for asynchronous communication between microservices, ensuring reliable message delivery, reduced latency, and decoupled dependencies for modular system design.
* Utilized **C#** for developing high-performance server-side systems to manage high-volume e-commerce transactions, achieving a 30% improvement in throughput for order processing pipelines.
* Constructed a modern e-commerce platform integrating **Next.js** for the front-end and **ASP.NET Core** for backend services, ensuring server-side rendering for **SEO** optimization, rapid page loads, and enhanced user interactions.
* Developed a real-time analytics dashboard using **React.js**, **AWS** **Kinesis**, and **C#**, providing actionable insights into user behavior, sales trends, and inventory levels, which contributed to a 20% increase in sales through data-driven strategies.
* Implemented a microservices architecture using **C#**, containerized with **Docker**, and orchestrated with Kubernetes, ensuring high availability, fault tolerance, and efficient resource utilization across all services.
* Integrated **third-party APIs** such as **Twilio** for SMS notifications and **WebRTC** for real-time communication within **Node.js** applications, enhancing user engagement and expanding platform functionality.
* Migrated inter-service communication protocols from **REST** to **gRPC**, reducing payload sizes by 40% and improving serialization/deserialization efficiency, resulting in faster response times for critical financial transactions.
* Containerized the e-commerce application using **Docker**, creating isolated environments for development, testing, and production, which streamlined the deployment process and ensured consistency across various stages of the software lifecycle.
* Created custom connectors in **Power BI** to integrate with **RESTful** **APIs**, allowing for dynamic data retrieval from the e-commerce system, which enhanced reporting capabilities and provided comprehensive analytics for business performance monitoring.
* Utilized **Blazor** **Server** for faster load times in administrative interfaces and **Blazor** **WebAssembly** for client-side performance.
* Designed and optimized **MongoDB** and **SQL** **Server** databases for high-volume transactional systems, implementing indexing and query optimization techniques to ensure data integrity and improve read/write performance.
* Developed scalable data processing pipelines and **ETL** workflows using **C#** with **LINQ** and **Entity** **Framework**, enabling efficient handling of large datasets and improving data accessibility for analytics teams.
* Created a **React.js**-based front-end for the e-commerce platform, integrating **Redux** for state management and **Material-UI** for a responsive, polished user interface, ensuring a seamless user experience.
* Enhanced platform security by implementing **OAuth2.0** and **JWT**-based authentication, ensuring secure user management, data protection, and compliance with industry security standards.
* Automated **CI/CD** pipelines using **Azure** **DevOps** and **GitHub** **Actions**, enabling smooth, reliable deployments with zero downtime and reducing deployment errors by 30%.
* Developed end-to-end testing suites using **Cypress**, **Selenium**, and **xUnit**, ensuring high-quality software deliverables with comprehensive test coverage and reduced production bugs.

## .NET Developer

### Pacer Staffing | Penn Wynne, PA June 2013 – Aug 2017

* Designed and developed a robust **e-learning platform** using **ASP.NET MVC**, deployed on **Azure**, facilitating efficient course management and tracking of student progress, enhancing the learning experience for users.
* Constructed a **Angular** based front-end for the e-learning platform, ensuring fast page loads, server-side rendering, and seamless navigation, hosted on **Azure App Service** for scalable deployment.
* Spearheaded the development of a solar energy management platform using **C#** and **Razor Web Pages**, implementing energy consumption tracking, solar panel monitoring, and secure payment processing for energy credits, with backend services deployed on **Azure** **VM**.
* Developed dynamic web applications for solar energy monitoring using **C#** and **RESTful APIs**, incorporating **Azure SQL Database** for seamless connectivity and high availability.
* Created a **C#** backend for real-time energy consumption analytics, utilizing **Azure Data Lake** for large-scale data analysis and achieving 25% faster processing times for extensive datasets.
* Designed and implemented a **Razor Pages**-based dashboard for solar energy clients, integrating **Chart.js** and **D3.js** for interactive visualizations, deployed using **Azure Static Web Apps** for rapid and reliable delivery.
* Built a **Node.js** microservice for processing real-time energy data, integrating with **Azure** **IoT** **Hub** for telemetry ingestion and analysis, enhancing data-driven decision-making capabilities.
* Developed a robust inter-process communication framework using **Azure** **Service** **Bus**, facilitating seamless data exchange between e-learning modules and improving system performance by 20%.
* Implemented multithreaded **C#** applications for processing high-volume energy telemetry data, improving system performance and reducing latency by 30%, with data stored in **Azure** **Cosmos** **DB** for real-time access.
* Orchestrated **Docker** containers with **Kubernetes**, enabling automated scaling and management of microservices while ensuring high availability and fault tolerance for critical components of the e-commerce platform.
* Designed and maintained **Azure SQL Database** and **PostgreSQL** databases for large-scale applications, ensuring optimal performance, scalability, and data integrity.
* Implemented **Power BI** for business intelligence reporting, developing interactive dashboards and visualizations that provided stakeholders with real-time insights into sales performance, customer behavior, and inventory management, facilitating data-driven decision-making.
* Developed a **C#** module for low-level energy consumption data parsing and integrated it into the solar energy management platform, ensuring efficient processing of telemetry data from **IoT** devices connected via **Azure** **IoT** **Hub**.
* Automated infrastructure deployments using **Terraform** and **Azure Resource Manager**, ensuring scalability, fault tolerance, and repeatable infrastructure as code.
* Applied **Agile** methodologies such as **Scrum** and **Kanban** to drive effective project management, fostering collaboration, adaptability, and timely deliverables.

**Education**

## Bachelor of Computer Science

### Iowa State University | Ames, IA | Aug 2009 – May 2013