David Brock Reilly

Software Engineer - Full Stack
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Full-stack software engineer with deep experience in .NET, SQL Server, and complex enterprise applications. Skilled in C#, VB.NET, REST APIs, JavaScript, HTML/CSS, and automation using PowerShell and Python. Strong background in debugging, data workflows, and building reliable, mission-critical systems.

EDUCATION

Bachelor of Science, Computer Engineering
Virginia Tech, May 2010

EXPERIENCE

Software Engineer — United Network for Organ Sharing (UNOS)
Richmond, VA | 2015–Nov 2025

Lead full-stack engineer supporting national transplant systems including Waitlist®, DonorNet®, TIEDI®, and Secure Enterprise®.

Key Technologies: C#.NET, VB.NET, ASP.NET MVC, Entity Framework, T-SQL, SQL Server, JavaScript, HTML, CSS, REST APIs, Postman, PowerShell, Python

• Developed and maintained major application features across multiple mission■critical UNOS systems.
• Built and optimized SQL Server queries, stored procedures, indexes, and large-scale data correction workflows.
• Designed and integrated REST APIs, including Postman-based automated validation suites.
• Implemented domain-driven data access layers using Entity Framework.
• Built responsive UI components using JavaScript, CSS, and Razor views.
• Authored PowerShell automation for deployments, environment tasks, and diagnostic tooling.
• Created Python scripts for ETL, data transforms, log analysis, and internal developer tooling.

Contributed to .NET, C++, and Python Open Source Projects

Developed AI Discord bots and improved conversational applications in Python and Java

Full-Stack Web Developer — FishContest (Startup)
Powhatan, VA | 2014–2015

Built full-stack PHP/MySQL platform with responsive front-end interfaces using HTML5, JavaScript, jQuery, CSS3, and Google Maps APIs. Designed backend logic, schemas, security, and a custom lightweight PHP framework.

HTML/CSS/JavaScript + Java/Grails Developer — Ellucian
Fairfax, VA | 2013

Built responsive UIs and middleware systems using Groovy, Grails, Spring, Java, JSP, and REST/JSON integrations. Primary developer for an e⬁transcript middleware service linking ERP systems with external APIs.

Software Developer → Senior Developer — Koofers.com
Reston, VA | 2007–2012

Developed front-end and backend features using JavaScript, jQuery, PHP, MySQL, and Python. Created iOS flashcard app; managed schema design, SQL reports, LAMP deployments, and custom MVC routing.

Notable Project — Open Python Pac-Man Engine

Designed extensible Pac-Man game in Python with scrollable mazes, custom tile rendering, and full A* pathfinding.

SKILLS

Languages & Frameworks: C#.NET, VB.NET, ASP.NET MVC, Entity Framework, SQL Server, T⬲ SQL, JavaScript, HTML5, CSS3, PHP, MySQL, Python, PowerShell, Java, Groovy/Grails, C/C++.

Web & API: REST APIs, JSON, AJAX, Responsive UI, Google Maps APIs.

Tools: Git, IntelliJ IDEA, NetBeans, Fiddler, Firebug, CURL, EC2.

Strengths: Debugging, database engineering, performance tuning, UI/UX refinement, technical writing, cross-team collaboration.