

Richard John Bowater

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in richardjbowater

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📍 Remote (UK Citizen)

Profile

Senior Software Engineer transforming complex technical challenges into intuitive user experiences, from enterprise software to hardware integration. Over a decade of experience architecting and building robust, user-centric applications for NHS and enterprise clients, particularly Windows desktop and cloud-based systems.

Proven track record of creating measurable business value: enabled proactive care for 200k patients through automated outreach in London, and delivered \$1.5M annual savings at a single NYC facility via a telemedicine platform deployed to 50 US healthcare centres.

Expert in C# .NET, WPF, and data visualization, driving projects autonomously from concept to completion for international clients. Seeking remote contract engagements to architect and deliver high-impact software solutions, preferably with UK-based organizations or internationally collaborative teams. Open to exceptional permanent positions.

Project Highlights

Senior Software Engineer

2017–2024

General Practice Software Solutions (UK)

Healthcare Solutions

Architecting and developing desktop applications that transform complex healthcare data into actionable insights for NHS Primary Care Networks. Built systems managing care coordination and clinical analytics for 200k patients across 22 practices in London.

- **PatientChaseX / PatientInsights (2022–2024):** Built a comprehensive healthcare management system using WPF, .NET 8, and MariaDB that unifies BI and CRM functionalities from legacy applications. Currently serves 22 General Practices across 4 Primary Care Networks in the London Borough of Sutton, managing data for 200k patients. Implemented advanced risk stratification algorithms, intelligent route optimization for clinician home visits, integration with local health services (e.g., pharmacy health checks), GOV.UK Notify integration for patient/practice communications, and geographical analysis tools for population health management. Secured NHS England Automation Grant for centralizing call/recall functions at PCN and borough level.
- **PatientLeaf (2017–2022):** Architected an award-winning clinical analytics platform (John Perry Prize, 2018) for real-time analysis of patient medical records. Developed sophisticated data visualization components providing Bloomberg-style views of medical data. Built complex interactive visualizations combining medication histories, clinical measurements, and patient records with synchronized cross-filtering and timeline exploration. Demonstrated 30% consultation time reduction across NHS practices.

Senior Software Engineer

2017–2018

PODKI (USA)

Kiosk

Led full-stack development and launch of a self-service kiosk platform, featuring a secure, user-friendly WPF-based kiosk application offering print/scan/copy/fax and PC rental services. Integrated payment gateways, QuickBooks for franchise management, and hardware peripherals (printers, scanners, card readers). Developed a custom installer, automated deployment, remote management, cloud-based document conversion, and cloud storage integration. Addressed complex challenges related to document conversion, PDF manipulation, and print optimization.

Senior Software Engineer

2015–2017

TripleCare (USA) (through Veracity Technologies for Trinity Dynamics)

Telemedicine

As the sole Software Engineer, developed TripleCare’s telemedicine platform, making key architectural decisions for security and scalability. Deployed across 50 healthcare facilities, the system enabled remote physician care through custom clinician and cart applications, integrating specialized hardware (PTZ camera, multi-channel audio, stethoscope) over VPN infrastructure hosted on AWS. One NYC facility achieved an 83% treat-in-place rate, delivering \$1.5M in Medicare savings. This success contributed to TripleCare’s acquisition by Curavi Health in 2018, expanding to 100 facilities across 14 states and later forming part of Arkos Health (\$130M, 2024).

Technical Skills

Core	C# .NET Core, WPF (Advanced Custom Controls), Desktop Application Development, Data Visualization
DB	SQL Server/T-SQL, MySQL/MariaDB, SQLite, MongoDB, Dapper, Entity Framework, AWS RDS
Web	RESTful Services, JavaScript, TypeScript, ASP.NET (MVC, Web API), Azure App Service, WCF
UI/UX	XAML, Avalonia, Telerik UI for WPF, Prism, MVVM
Practices	CI/CD, Git, TDD, Automated Testing (xUnit, FlaUI)
Healthcare	HIPAA Compliance, EHR Integration (EMIS), Telehealth/Telemedicine
Cloud/DevOps	AWS (EC2, S3, RDS), Azure (App Service, VMs, Pipelines), PowerShell, Docker, Linux, GitHub Actions
Other	C, Python, Mathematica, Windows Installer (WiX Toolset), Windows Services
Interests	Clojure, Blazor, Angular, React, PyTorch

Awards & Recognition

- John Perry Prize from BCS Institute (2018) for PatientLeaf’s innovation in clinical decision support
- NHS England Automation Grant (2022) to revolutionize patient recall at PCN and borough level
- EMIS Partner Program Awards shortlist (2021) for excellence in healthcare IT solutions

Education

BSc Computer Science with Software Engineering

1998–2001

University of Essex

MPhys Theoretical Physics

2005–2006

Durham University

Incomplete/Deferred