Mike Belie

Senior Software Engineer

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Melissa, TX

Accomplished software engineer with proven success delivering innovative solutions across medical, life science, industrial automation, and fintech sectors. Expert in multiple programming languages and frameworks, specializing in scalable applications and operational efficiency. Demonstrated leader in mentoring technical teams and implementing engineering best practices to drive quality and productivity.

Technical Proficiencies

Languages C#, C++ (+CLI), Java, Dart, JavaScript, TypeScript, Visual Basic

.NET, ASP.NET Core, Flutter, WPF, WinForms, WCF, Entity Framework, Microservices, REST, Web

Technologies Components, Vue, Angular, Node.is, HTML, CSS/SCSS, iQuery, MSCRM/Dynamics 365, LINQ, Three.is,

Reactive Extensions (Rx), SignalR

Database Relational, Graph, NoSQL, MS SQL, Sqlite, Neo4j, DynamoDB

Cloud AWS, Azure

Testing Unit Tests, UI Automation, CodedUI/UIA, Application Profiling, Debugging, Crash Analysis, MSTest,

NUnit, Moq

DevOps Docker, Git, GitLab, GitHub, Jenkins, Azure, CI/CD

Concepts OOD/OOP, SOLID, MVVM/MVC, Dependency Injection, Infrastructure as Code (IaC)

Industrial Automation (OPC/UA), Motion Control, Machine Vision, IIS, UML, Agile,

Other PowerOn/SymXchange, Protobuf, JSON, LitElement, PowerShell, Coverity (OWASP/CWE), Static

Analysis, LDAP, Active Directory, AAD (Entra ID)

Professional Experience

NOVO Engineering, Vista, CA Principal Software Engineer 2018 - Present

Architect and deliver mission-critical software solutions for medical, life science, and industrial automation applications using Flutter, .NET/C#, WPF, ASP.NET Core and Angular. Lead development of HMI software for robotics projects. Mentor junior engineers. Champion technical excellence by researching, assessing, and integrating innovative technologies.

- Architect and deploy enterprise solutions leveraging Azure cloud services including BLOB Storage, Functions, Key Vault, Entra ID (AAD), Managed SQL, Virtual Machines and App Service.
- Increased production uptime by implementing Polly-based fault tolerance in C#/Angular automation robot application, eliminating 95% of workflow interruptions and reboot sequences.
- Boosted automation efficiency by 50% through innovative parallelization of image processing routines using C# TPL.
- Established robust integration between robot control software and PAC systems using C#, WCF and OPC/UA, achieving exceptional uptime and automated parameter/result transmission eliminating manual workflows.
- Enhanced patient safety in spinal surgeries by architecting collision detection system using Three.js and TypeScript, reducing potential surgical complications.
- Enhanced resource planning by developing Flutter/ASP.NET Core enterprise application, resulting in extreme reductions in planning time and successful replacement of legacy Excel system.
- Streamlined plant analysis workflow by developing C#/Cognex VisionPro imaging segmentation system, eliminating manual analysis.

- Promoted to Principal Software Engineer for consistently exceeding performance targets.
- Implemented CI/CD pipelines in Jenkins and GitLab.
- Drove Agile practices including backlog refinement and sprint planning.
- Authored comprehensive technical documentation.

Symitar (Jack Henry), San Diego, CA Software Engineer Advisory

2012 - 2018

Develop flagship credit union transaction processing application serving thousands of daily users leveraging WPF, C# and C++. Modernize legacy PL1 systems to Java web services. Established engineering excellence by implementing development standards and mentoring Software Development Engineers in Test (SDETs).

- Developed a WPF/C# Single Sign-On (SSO) authentication system for Symitar's Episys Quest, leveraging asymmetric encryption to fortify security while simplifying user authentication workflows.
- Created encrypted flight recorder system to securely capture production log data, reducing debug time and enhancing data security.
- Led vital 18-month automation transformation initiative, implementing engineering best practices that improved code quality metrics and reduced technical debt.
- Engineered high-performance WCF API that slashed test execution times from several seconds to under 100ms, enabling 10x more comprehensive test coverage.
- Architected XML-driven test automation framework using CodedUI/UIA and C#, generating and executing 25,000+ tests annually while "eating our own dog food" by leveraging SymXchange API for dynamic data.
- Promoted to Software Engineer Advisory after consistently exceeding performance metrics and driving technical innovation.
- Selected as Employee of the Quarter for exceptional contributions to automation infrastructure and mentoring initiatives.

Hitachi Solutions America, Irvine, CA Senior Consultant

2011 - 2012

Architected and delivered custom Microsoft Dynamics CRM solutions utilizing .NET/C#, web services, and Silverlight, resulting in improved workflow efficiency and seamless third-party integrations.

- Streamlined client operations by transforming manual 30-60s validation process into sub-second automated solution using ASP.NET, C#, JavaScript and AX web services.
- Enhanced enterprise workflow management by developing MSCRM module with C# and Silverlight, enabling non-technical users to configure and execute complex workflows through intuitive GUI ribbon interface.
- Created business-critical ETL tools with graphical interfaces that accelerated client data ingestion.

Order One Software, San Diego, CA Software Engineer

2004 - 2013

Led full-stack development across desktop and web platforms, leveraging .NET/C#, C++, ASP.NET, WPF, MSCRM, MFC, and WinForms to deliver enterprise solutions.

• Engineered and deployed crucial medical device testing software using C++/MFC, ensuring quality compliance for production floor operations at Fortune 500 healthcare manufacturer.

Education

Bachelor of Arts in Interdisciplinary Computing and the Arts Major (ICAM)

University of California San Diego, San Diego, CA