

Mike Belie

Software Engineer

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Melissa, TX

Accomplished and detail-oriented professional with extensive experience in developing innovative software solutions for a variety of industries, including medical, life science, industrial automation, and financial technology. Proficient in utilizing multiple programming languages and frameworks to deliver scalable and efficient solutions. Proven track record of engineering applications and streamlining operations. Possess strong aptitude for mentoring and fostering growth within technical teams. Committed to implementing best practices and engineering standards to elevate team productivity and software quality.

Technical Proficiencies

Languages	C#, C++ (+CLI), Java, Dart, JavaScript, TypeScript
Technologies	.NET, ASP.NET Core, Flutter, WPF, WCF, Entity Framework, Microservices, REST, Web Components, Vue, Angular, Node.js, HTML, CSS/SCSS, jQuery, MSCRM/Dynamics 365
Database	Relational, Graph, NoSQL, MS SQL, Sqlite, Neo4j, DynamoDB
AI	Machine Vision (OpenCV, Cognex VisionPro), Image Classification & Segmentation
Cloud	AWS, Azure, IaC
Testing	Unit Tests, UI Automation, CodedUI/UIA, Application Profiling, Debugging, Crash Analysis
DevOps	Docker, Git, GitLab, GitHub, Jenkins, Azure, CI/CD
Concepts	OOD/OOP, SOLID, MVVM/MVC, Dependency Injection, Infrastructure as Code (IaC)
Other	Industrial Automation, OPC/UA, Motion Control, IIS, UML, Agile, PowerOn/SymXchange, Protobuf, JSON, LitElement, PowerShell

Professional Experience

NOVO Engineering, Vista, CA
Principal Software Engineer

2018 — Present

Develop cutting-edge software solutions for medical, life science, and industrial automation applications. Engineer robust applications with Flutter, .NET/C#, WPF, ASP.NET Core and Angular. Create HMI software for robotics projects, utilizing both thick and thin client applications. Mentor junior engineers, provide guidance and foster professional growth.

- Designed and implemented marketable Flutter application to replace in-house Excel resource planning tool. Employed ASP.NET Web API/MSSQL back-end.
- Enhanced patient safety in spinal surgeries by creating collision detection features, elevating surgeon planning capabilities and confidence. Utilized Three.js and LitElement web components in TypeScript.
- Implemented transient fault handling using Polly in C# for automation robots to prevent costly workflow interruptions, loss of product, and lengthy reboot sequences.
- Successfully integrated production floor robot software with back-end automation controller (PAC) via WCF and OPC/UA.
- Developed imaging segmentation routine using C# and Cognex VisionPro to automate analysis of plant-callus anatomy, reducing manual error.
- Improved automation robot efficiency by approximately 50% through parallelization of image processing routines using TPL in C#.
- Crafted approximately 12 distinctive web components using LitElement in TypeScript, enhancing overall functionality.

- Exceeded position expectation and promoted from *Senior Software Engineer* to *Principal Software Engineer*.

Symitar (JHA), San Diego, CA
Software Engineer Advisory

2012 – 2018

Developed and enhanced WPF user interface and single sign-on capabilities for Episys Quest, key application for credit union transaction processing. Engineered encrypted flight recorder for postmortem bug analysis and debugging employing .NET/C#. Implemented software engineering best practices and performed code reviews. Co-created managed-coding standards and unit testing guidelines for UX team. Mentored software development engineers in test (SDETs).

- Volunteered for 18-month automation initiative to instill software engineering best practices, resulting in enhanced team processes and code quality.
- Increased test automation efficiency by creating custom WCF API, resulting in sub-second automation routines versus multi-second legacy counterparts.
- Designed XML-based test automation framework to generate 25K+ tests in one year. Leveraged CodedUI/UIA and C#.
- Exceeded position expectation and promoted from *Senior Software Engineer* to *Software Engineer Advisory*.
- Recognized as "Employee of the Quarter" in December 2017.

Hitachi Solutions, Irvine, CA
Senior Consultant

2011 – 2012

Engineered MSCRM customizations and integrations utilizing web services, .NET/C# and Silverlight.

- Streamlined client operations by transforming manual validation process into sub-second automated solution using ASP.NET, C#, JavaScript and AX web services.
- Designed and implemented workflow management module for MSCRM utilizing C# and Silverlight. Elevated enterprise workflow management by enabling workflow configuration and execution via intuitive GUI ribbon.
- Authored GUI-based ETL tools to simplify client data ingestion.

Additional Experience

Various desktop and web development utilizing .NET/C#, C++, ASP.NET, WPF, MSCRM, MFC and WinForms.

- Created medical device test suite used on production floor of Fortune 500 corporation leveraging C++/MFC.

Education

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

University of California San Diego, San Diego, CA

Voluntary Experience

Certified-Intermediate AYSO Referee