Winchester, CA
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Mike Belie

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I am a software engineer with over 20 years of experience designing and implementing software solutions. I am committed to leveraging software to solve problems and improve processes.

Skills

- Languages: C#, C++, C++/CLI, Java, Dart, JavaScript, TypeScript, Python
- Technologies: .NET, ASP.NET, ASP.NET Core, Flutter, WPF/MVVM, SQL, Vue, Angular, MSCRM, PowerOn/SymXchange, AWS, Azure, REST, WCF, Web Components (LitElement), Protobuf
- Other: Data structures, OOD/OOP, SOLID, HTML, CSS, SCSS, Three,js, Reactive Extensions(Rx), SignalR/Web Sockets, Industrial automation (OPC/UA), Motion control (ACS, Copley, Maxon), Machine vision (VisionPro, OpenCV), Unit testing, CI/CD, UI automation, CodedUI/UIA, Web & desktop applications, Git, PowerShell

Professional Experience

Principal Software Engineer   **NOVO Engineering**   **Feb 2018–Present**
Software   Vista, CA

- Wrote an internal resource tracking application using a Flutter front-end with an ASP.NET Core back-end
- Developed a collision detection feature that allows surgeons to visualize and avoid collisions between a patient's spinal anatomy and surgical hardware while developing screw plans for spinal surgeries. Improved patient safety and surgeon confidence in screw plans
- Enhanced C# image processing/machine vision features used by an automation robot to leverage parallelism which drastically increased product performance
- Added transient fault handling to a robot product which prevented costly workflow disruptions
- Built HMI software for various robotics projects using both thick & thin client applications
- Provided software architecture and development for various client projects
- Created an imaging segmentation routine used to differentiate various aspects of plant-callus anatomy
- Integrated a client's production robot software with PAC via OPC/UA
- Produced various web components using LitElement
- Promoted from Senior Software Engineer to Principal Software Engineer
- Mentored junior engineers

Software Engineer Advisory   **Symitar (Jack Henry & Associates)**   **Mar 2012–Feb 2018**
UI/UX Group   San Diego, CA

- Developed product features for Symitar's flagship product, Episys Quest
- Designed and implemented an encrypted flight recorder for use in postmortem debugging of Symitar software
- Implemented a custom automation API using WCF that allowed automation frameworks like CodeUI to drive the product GUI which resulted in extreme increases to test automation speed
- Designed and implemented a test automation framework that allowed dynamic tests to be written in XML. Allowed for the creation of 25K+ automation tests in a 12-month period
- Brought software engineering best practices to the automation team during an 18 month volunteer engagement
- Co-authored managed-coding standards and unit testing best practices for the UX group
- Promoted from Senior Software Engineer to Software Engineer Advisory
- Received employee of the quarter in Dec 2017

Senior Consultant	**Hitachi Solutions**	**Jul 2011-Mar 2012**
Software	Irvine, CA	

- Created a validation tool in MSCRM that allowed a client to verify customer and product information, real-time, against their MSAX-ERP system. Turned a time consuming, multi-step, manual process into an automated near instantaneous one

Built a deal flow/pipeline tracking tool that could be installed as a module in any MSCRM instance. Allowed administrators to define workflows for end users to follow and interact with via a GUI ribbon. User interactions were captured and used to drive subsequent workflow

Senior Software Engineer	**Order One Software**	**Jul 2004–Jul 2013**
Software	San Diego, CA	

- Produced an XML driven user interface engine written in C# that allowed a client to rapidly produce custom web form mash-ups of MSCRM fields from disparate entities. Permitted the client to visualize data in ways not otherwise supported in MSCRM
- Created a CD based (no install footprint) application in MFC/C++ for testing medical hardware. Used on the production floor of a Fortune 500 corporation
- Implemented a photo kiosk application in .NET with card reader integration, image processing, and custom form controls
- Developed a financial calculator used by a client to rapidly prototype and visualize the various financial aspects of property leases

Software Contractor	**Multiple Companies**	**Jul 2000-Jul 2004**
Independent	San Diego, CA	

- During this period, I held various full-time and contract positions developing web and desktop applications
- Taught a course at Learning Tree University called Advanced Web Animation in Flash: Interactivity with Actionscript

Education

- **BA ICAM (Interdisciplinary Computing and the Arts Major),** University of California San Diego, San Diego   **2001**
- **Relevant Coursework:** Computer science, series of science and engineering calculus courses, computer-generated art (created a fractal generator in Lingo), game programming (wrote a version of the classic Space Invaders game)

Extracurricular

- Certified-Intermediate AYSO Referee