

I am passionate about leveraging software to solve problems and improve processes.

## Skills

### CORE

- Strong OOD understanding/application
- Skilled with relational database design/concepts
- Excellent interpersonal and communication skills
- Strong team and self-directed worker
- Adept at learning new skills/technologies

### EXPERIENCE

- .NET/ASP.NET
- WPF (MVVM), Silverlight
- Windows & Web Services
- WCF
- AngularJS, Vue.js
- JavaScript
- HTML, CSS
- WinForms, MFC
- Machine Vision: VisionPro & OpenCV
- Automation/Motion Control: ACS, Copley, Maxon
- Microsoft Dynamics CRM/AX
- Rails
- PowerOn, SymXchange

### LANGUAGES

- C#/.NET (15+) • Python (1)
- C++/CLI (10+) • Ruby (1)
- Java (3+)

### TESTING/SCM

- TestNG, NUnit, MSTest, Fakes, Mockito, Rhino Mocks, RSpec
- UI Automation with CodeUI/UIA
- Jenkins, Git, TFS, Perforce

### DATABASE/OS

- MS SQL, Sqlite, No-SQL (DynamoDB)
- Entity Framework, Room
- Windows, Linux, Android

## Professional Experience

### NOVO ENGINEERING

FEB 2018 - PRESENT

Senior Software Engineer

NOVO is a product development engineering company that helps clients bring their products to market. My responsibilities include software & database architecture, development, documentation, unit testing, SCM/CI, and peer reviews

#### Examples of Work

- Enhanced C# image processing features to leverage parallelism which drastically increased performance and throughput
- Provided software architecture and development for a new medical device
- Added transient fault handling to robot software that detects and recovers from hardware errors
- Balanced simultaneous client workloads
- Learned Python, Ruby/Rails and Android-native development
- Quickly adapted to new projects and technologies

### SYMITAR

MAR 2012 - FEB 2018

Software Engineer Advisory

Symitar, a Jack Henry & Associates company, develops core credit union software and related services. My responsibilities included the design and development of new product features, technology evolution, unit testing, defect management/resolution, mentoring and code reviews

#### Examples of Work

- Designed and implemented an encrypted flight recorder for use in postmortem debugging
- Authored managed-coding standards and unit testing best practices for the UX group
- Brought software engineering best practices to the automation team during an 18 month volunteer engagement
- Implemented a custom automation API in Episys Quest (using WCF) that allows automation frameworks to bypass CodedUI and read/write from/to the Quest GUI directly via sub-second API calls. This resulted in extreme increases to test automation speed
- Designed and implemented a test automation framework that allowed tests to be written declaratively, in XML. Allowed for

the creation of 25K+ tests in a 12 month period

#### Accolades

- Promoted from *Senior Software Engineer* to *Software Engineer Advisory*
- Received employee of the quarter in Dec 2017

## HITACHI SOLUTIONS

JUL 2011 - MAR 2012

Senior Consultant

Hitachi Consulting provides software, logistics, and business consulting services around the world. Responsible for MSCRM customization and integration with external systems via web services. Enhanced MSCRM instances with custom functionality using Silverlight, C# and JavaScript/HTML/CSS

#### Examples of Work

- Designed and implemented a validation tool in MSCRM that allowed a client to verify customer and product information, real-time, against their ERP system (MSAX). Turned a time consuming, multistep, manual process into an automated near-instantaneous one.
- Designed and implemented 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 dynamic GUI. User interactions were recorded and used to drive workflow

## ORDER ONE SOFTWARE

JUL 2004 - JUL 2013

Software Engineer/Consultant

Order One Software provided software consulting services to clients throughout the San Diego area. My responsibilities included software and database architecture, development, unit testing and documentation. I supported multiple clients and internal development responsibilities simultaneously

#### Examples of Work

- Implemented an XML/C# driven user interface engine that allowed a client to rapidly produce custom web form mashups of MSCRM fields from disparate entities. Allowed the client visualize data without typical MSCRM form constraints
- Created a CD based 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

## OTHER SOFTWARE DEVELOPMENT

2000 - 2004

Programmer/Consultant

During this period, I held various full-time and contract positions developing software with ASP.NET, ASP, C#, SQL, WinForms, and Flash/Actionscript for various industries. I also taught a course at Learning Tree University called *Advanced Web Animation in Flash: Interactivity with Actionscript*

## Education

## THE UNIVERSITY OF CALIFORNIA SAN DIEGO

DEC 2000

Bachelor of Arts, Interdisciplinary Computing and the Arts (ICAM)

Coursework: A mixture of computer science, mathematics (series of science and engineering calculus courses), computer-generated art, game programming, and visual arts. Wrote a version of the classic *Space Invaders* game and created a fractal generator in *Lingo* (in spite of the lack of any line drawing APIs)