

# JOEL SELF

---

(425) 679-9559  
joelsself@gmail.com

## RELATED SKILLS

- |         |              |           |         |           |
|---------|--------------|-----------|---------|-----------|
| ▪ C/C++ | ▪ Java       | ▪ ASP.NET | ▪ SWIG  | ▪ .NET    |
| ▪ C#    | ▪ JavaScript | ▪ HTML    | ▪ Boost | ▪ Linux   |
| ▪ Perl  | ▪ Ruby       | ▪ jQuery  | ▪ SQL   | ▪ Windows |

## TOOLS EXPERIENCE

- |                 |           |              |        |        |
|-----------------|-----------|--------------|--------|--------|
| ▪ Emacs         | ▪ Eclipse | ▪ Subversion | ▪ BASH | ▪ LINQ |
| ▪ Visual Studio | ▪ Git     | ▪ GDB        | ▪ MVC  | ▪ SQL  |

## WORK EXPERIENCE

### Senior Software Engineer, *FinFolio*

July 2015 – November 2015

- Found and fixed bugs in the FinFolio client software with C#, .Net, SQL, and Visual Studio.
- Implemented new check box selection feature in the FinFolio client with C#, .Net, and XAML.
- Created, maintained and owned the REST-based WebAPI for FinFolio webservice.

### Senior Developer (.Net), *TwentyEighty*

September 2014 – July 2015

- Wrote a Windows service in C# to clean up a key server and keep it in working order.
- Designed and implemented REST web services in .NET for the corporate intranet.
- Wrote web controls in ASP.NET, JavaScript and jQuery to consume online web services in order to display customized content to website visitors.
- Built a website for application inventory management from the ground up using C#, MVC, and LINQ.

### Software Engineer, *zVelo Inc.*

March 2011 – August 2014

- Added comprehensive statistics tracking package to a multi-threaded client SDK that would run with tens of thousands of threads concurrently using C, C++, the STL, Boost and the Eclipse IDE.
- Wrote server back-end Perl scripts to receive and process large volumes of client SDK data and insert data into a large PostgreSQL database in the correct format for analysis.
- Designed and implemented web URL grouping/hierarchy tool in C++ to run several orders of magnitude faster than the previous tool.
- Debugged and fixed customer issues on a real-time basis using tools such as GDB, Valgrind, and Eclipse CDT.

### Software Design Engineer, *Microsoft Corporation*

September 2006 – February 2011

- Design, development, and maintenance of several SharePoint Server features in both SharePoint Foundation with C++ and in SharePoint with C#, ASP.NET, JavaScript, and HTML.
- Designed and coded in managed C# and unmanaged C++ client code and server code as well as features that work between the client, including Word, Excel, PowerPoint, SharePoint Designer, and OneNote and the SharePoint Server.
- Collaborated seamlessly on 10 features at once with around 6-7 teams including several Testers and PMs all with different personalities and expectations.
- Specific product development experience: Word, Excel, PowerPoint, SharePoint, and SharePoint Foundation.

**Software Development Intern, ExxonMobil**

May 2005 — August 2005

- Added simplified workflows to ExxonMobil's premiere reservoir simulator, including a wizard using Visual Studio and C++.
- Improved ease of use and training needed to use the simulator resulting in a reduction of time to create a simple reservoir model from 1–2 days to 30 minutes.

**Research Assistant, Brigham Young University**

April 2004 — August 2006

- Designed and coded tools for the verification of interrupt driven software using Emacs, C++, M68HC11 assembly language.
- Researched and implemented ways of speeding up the verification tool by 30x by integrating a custom built library compiled from GDB source code.
- Created and modified C and assembly language programs to run on embedded systems to verify on the tool in order to produce data for my thesis and workshop publication.

**EDUCATION****MS in Computer Science, Brigham Young University**

April 2007

- Thesis: "On-the-fly Dynamic Dead Variable Analysis"
- Publication: J. Self and E. G. Mercer. "[On-the-fly Dynamic Dead Variable Analysis](#)," *SPIN Workshop on Model Checking of Software*, Berlin, Germany, pages 113 — 130, July 2007.

**BS in Computer Science, Brigham Young University**

April 2005

**PERSONAL PROJECTS****Google Cache Browser**<https://github.com/joelfself/GoogleCacheBrowser>

- A Chrome browser extension using JavaScript, HTML, and CSS that lets you seamlessly browse the google cache as if you were browsing the real websites.
- Turns on and off per tab instead of browser wide.
- Has an unobtrusive mode that prompts you to turn on cached browsing for only a page, host or domain when you receive a 404 or 503 response.

**FannCSharp**<https://github.com/joelfself/FannCSharp>

- A work-in-progress wrapper around the FANN (Fast Artificial Neural Network) C/C++ library that lets you use FANN from C#.
- Rewrote classes and methods to follow C# conventions more closely.

**Page To Fiddle**<https://github.com/joelfself/PageToFiddle>

- A work-in-progress Chrome browser extension using JavaScript, HTML, and CSS that takes the page you are currently visiting and turns it into a [JSFiddle](#).
- Takes inline JavaScript and CSS and puts them in their respective panes. Finds external JavaScript and CSS links and put them in the external resources list. Extracts the HTML body and puts it in the HTML pane.

**VOLUNTEER EXPERIENCE****Full-time Volunteer, Region II, Philippines**

August 2000 — July 2002

- Managed and trained five other full-time volunteers while managing my own area at the same time.
- Work included community and humanitarian service.