

## Overview

I am a Full Stack developer with many years of experience. Well versed in LAMP and MERN/MEVN (Full Stack). My wide ranging background gives me the breadth to see how all of the pieces of large software projects fit together. I enjoy the interaction with the other roles (QA, Designers, DevOps, Producers) in projects large or small.

Desire Full or Part Time contract/position. California Native, currently in Indiana. US Citizen with Passport. Am willing to travel and am open to relocation.

Energetic! Some key companies and projects I have been involved with are: Trim CRM, Stitcher.com, Webtrends, Friendster, AOL.Com (AOL), AutoCAD R12/R13 (Autodesk ), Island Write/Paint/Draw (Island Graphics). I also write (O'Reilly website).

- [ThereThenThat - Crowdsourced search by Location, Time, and Tags](#)
- [Snapperstore - Sample image, audio, and video upload client & server](#)

## Skills

- [Apache](#) - extensive configuration, 5+ years of experience - use of many modules such as [mod\\_rewrite](#), virtual hosts, etc. Prefer to use MAMP for local dev environment.
- **HTML5, CSS3** - have done lots of hand coding, lots of dynamic generation from several languages (PHP, JavaScript, Perl, Tcl). Excited about flexbox and grid.
- **JavaScript/ES6** - Have used this extensively off and on since it was first introduced. Adept with [ES6](#), [jQuery](#) (and many plugins), React/JSX/Redux/MobX, Vue.js, [Node.js](#)/Express. Also interested in JS in the 3D space (WebGL), via three.js. C3.js charting.
- **Tools** - Webpack / Parcel / npm / git / etc.
- [PHP](#) - Preferred language for OO web development. Have used GD graphics lib. Familiar with CakePHP.
- [MongoDB](#) - Prefer for NoSQL projects. I like the technique of query population.
- [MySQL / SQL](#) - Experience in a wide variety of contexts. Also am personally using to develop my own photo database (called from Apache via PHP)
- **Unix/Linux/Mac Environments: bash/sh/tcsh & CLI tools** - Lifelong Unix user & programmer. Contributed an article on advanced Csh usage (including my grabchars package) to the book "[Unix Power Tools](#)".
- **XML & JSON** - writing / consuming in a variety of contexts. I prefer working with JSON, but am adept with both.
- **OLDER:** I do not mention many languages and bits of tech here, but am happy to talk about the usual suspects (some Compiled Languages in the list)
- **See Also:** <https://coggle.it/diagram/V6l9hYwPmtdAUuZ4>
- **Other:** I have done technical review for books published by Prentice Hall (Pearson Education): [The XML Schema Companion](#), [XSLT 2.0 Web Development](#), and [Spring Into HTML and CSS](#). Also technical review for O'Reilly: Programming 3D Applications with HTML5 and WebGL

## Experience

### Quick Mount PV – March – August 2018

Issue tracking and written evaluation of QDesign app effort (Solar Panel roof layout projects). Acted as liaison between product manager and development team in Ukraine. Also started development of a Parts Config Editor SPA (Vue.js + Node.js) to produce JSON file descriptions of panels, mounts, etc. (to get away from hardwired dependencies in code) (Contract)

### Upwork - October 2017 -

- Image Scrapbook – upload audio / video / photos to file store (Vue.js + Node.js)
- (NDA / Stealth Project) – wrote prototype to measure user sentiment while watching videos of talks. Positive & Negative feedback was gathered per second while viewing. Resulting data used to show bar charts of mood for all viewers. (Vue.js + c3.js + Node.js + MongoDB)

### Route 66 Digital - October 2016 - February 2017

Full stack developer (MERN & MEVN) for Content Management Framework, and interactive web app for use in a trade show. (Contract)

Stack includes: [Node.js](#), [Express.js](#), [Mongo](#), [React](#), [MobX](#), [Vue.js](#), [vue-stash.js](#), [jQuery](#), [Velocity.js](#), [socket.io](#), and much more.

### CMF

Content Management Framework, used to organize site data and layout for trade show interactive displays (such as a multichannel explainer for a car, drone, or other tech product). Produces a detailed JSON output and static assets which are used to drive an external client app. Done as a MERN stack.

### Mural

Client side interactive app driven from JSON output and static assets from CMF. Hybrid approach of an overall Vue.js scaffolding, with internal jQuery interactive modules (lots of eventbus usage, and data organization via vue-stash). Uses Velocity to drive animations, and makes extensive use of flexbox and css transforms.

### Trim CRM - December 2014 – June 2016

Full stack developer for a site aimed at business relationships. Transforming the client prototype into something polished and production ready.

Stack includes: OOP PHP, MySQL, JavaScript, [jQuery](#), [jQuery UI](#), [HighCharts](#), [TableSorter](#), [FullCalendar](#), [Coverflow](#)

Have extensively transformed code organization, and introduced [SASS](#) to make stylesheets more manageable. We support browsers that use Flexbox, which conveniently eliminates older, more insecure versions.

In addition to the programming aspect, I've done much to help educate the client as to the software/web development process. This includes:

- Transitioning client from DreamWeaver/GoDaddy/FTP to local/github/RackSpace (basic dev, staging, production)

- Use of [Balsamiq](#) to help articulate UX
- Use of [ScreenFlow](#) to walk through dev concepts
- [Slack](#) for documentation trail, everyday communication, etc.
- [Github](#) for source code control (and some issue tracking, client switched to [Scrum.Do](#))
- Local development environment via [MAMP](#), [CodeKit](#), [Sequel Pro](#), and [Sublime](#)
- Articulating need for test plan, including test data, and means of automating / repeating input (such as [PostMan](#))

**Stitcher, Inc. - San Francisco, CA - December 2013 - October 2014**

Full stack developer for the podcast service: [Stitcher.com](http://Stitcher.com) and [Partners.Stitcher.com](http://Partners.Stitcher.com). Sample projects: memcache + frontside client caching of key Top 10 list page items, converting episode search results to a display which facilitated creating Top 10 lists, and numerous Partner Portal enhancements to make it easier for show owners to edit their information. Also did extensive work with Facebook and Twitter APIs to determine the social networking reach (likes and followers) of new partners, in order to determine how to handle incoming show hosting applications. Lots of OOP PHP, jQuery + plugins + JavaScript, CSS3 w/media queries, and use of external APIs (Facebook, Twitter, and Google).

**WebTrends Social - San Francisco, CA - April - September 2012**

Implemented "Promote A Post" (placing targeted ads to lead to Facebook Fan/Business Page posts). This work spanned OOP JavaScript, jQuery + Plugins, PHP, and the Facebook OpenGraph API. Some of the features include: dynamic ad campaign creation, scheduling, and editing, autocomplete of targeted fields, dynamic audience reach measurements, and previous ad editing. Also fixed many bugs, and enhanced the moderation filters (extensive RegExp work).

**Freelance Web Developer**

**December 2004 - Present**

I have focused on contracting and enjoying the breadth of widely different projects over the last few years.

**MaestroMarket.com - San Francisco, CA - November - December 2011**

Bug fixes and feature implementation for this Ruby On Rails-driven web site. Solved a form validation problem by correcting event binding setup. Added instant thumbnail preview of profile image before upload (utilizing HTML5 FileReader API). Optimized site by moving all JavaScript initialization to the bottom of pages (which needed special handling on some pages where JavaScript snippets assumed that libraries were already loaded.)

**for Res3D.com - San Francisco, CA - October - November 2011**

Along with Tony Parisi, I constructed an interactive 3D UI prototype for modern browsers. The WebGL app utilized the Three.js javascript toolkit. The idea was to have a series of top level categories (represented as icon spheres), which would pop up interactive 2D HTML panels

**JigoCity - Los Angeles, CA - February - April 2011**

Ported CakePHP web app to iPhone and Android (mostly view layer - CSS, HTML, JavaScript, and PHP). JigoCity is a daily deals site, much like Groupon, with most locations in the Asia Pacific region.

**Aquent / Institute Of Reading Development - Novato, CA - April - May 2010**

Transformed a large PHP code base to make it usable in the contexts of development, staging, and production (they were doing development with one copy of the code on a live server). Created a very flexible set of logging functions with URL overrides for debugging levels and filtering by keyword. Replaced all hardwired dependencies with a class that would give appropriate values for development, staging, and production.

**TekSystems / Wells Fargo - San Francisco, CA - November 2008 - February 2009**

Developed an AJAX search mashup Proof of Concept for an internal Wells Fargo web portal. Utilized the [JackBe Presto](#) mashup software on the server side to search against multiple data sources. Also utilized an internal JavaScript framework that is layered on top of the [Yahoo User Interface Library \(YUI\)](#). The project required the use of numerous technical solutions (such as the http proxy app [Fiddler](#)) to show a unified search portlet running within a live test site (without changing anything on the test site itself)

**Vivaty - Menlo Park, CA - April - July 2008**

I did enhancement and creation of interactive objects for Vivaty's Web 3D environment. I worked with X3D, JavaScript, and PHP to help extend and stabilize the audio, video, and photo objects. I also wrote the interactive portion of the BFF Frames (Best Friends Forever).

**InterCast Media - San Francisco, CA - October 2007 - April 2008**

Implemented message scheduling and dispersal via IM, Email, and SMS for subscribers to a self-improvement social networking site. Created mechanisms to throttle dispersal and to reply to the messages. Used PHP, MySQL, TCL/Expect, and Libpurple.

**WildFireWeb - Petaluma, CA - May - October 2007**

Multiple PHP/Ajax projects, including full implementation of a school alerts system, an editor for selection and random rotation display of Amazon Associates ads, a web driven email client with attachments, and feature enhancements to the built in photo galleries.

**Limelife - Menlo Park, CA - August 2006 - February 2007**

Implemented a templated version of [LimeLife.com](#) using a Zones/Modules approach. Extensive use of PHP5/Classes.

**Linden Labs - San Francisco, CA - May 2006 - July 2006**

Implemented Developer Downloads component for [SecondLife.com](http://SecondLife.com) from scratch. PHP + Smarty/MySQL/Apache.

**Friendster - San Francisco, CA - February 2006 - May 2006**

I was thoroughly immersed in implementing 12 home page features of Friendster.com, a LAMP-based social networking site. PHP/MySQL/Perl/Apache.

**Metaliq - San Francisco, CA - November 2004 - June 2005**

Developed a large Flash client application (under NDA) at [Metaliq](http://Metaliq.com). All of the ActionScript 2.0 code is in classes, and I made extensive use of XML to pass information to and from the server side. An example of the end result can be seen at [AOL Moviefone Movie-Meter](http://AOL.Moviefone.Movie-Meter).

**America Online - White Plains, NY - December 2003 - September 2004**

**Contract Web Engineer**

Developed Flash and HTML versions of the Photo Gallery, which is used extensively in the AOL.Com [movies channel](http://movies.channel). The galleries use a lot of Tcl (via [AOLServer](http://AOLServer)), JavaScript, and CSS. I also designed and implemented the online forms that editors use to create galleries (and gallery sequences). Did extensive testing and documentation of this component.

Extensive rearchitecture of the tooltips component of the [TV Channel](http://TV.Channel) component of AOL.Com. The Tcl and JavaScript work done was applied to other channels, sped up server performance, and reduced the overall amount of HTML written to the client side.

**Self-Directed Project - 2001 - current**

Designing and implementing [FlexiPhoto](http://FlexiPhoto), a web-based photography database. Working with [PHP/MySQL/Apache](http://PHP/MySQL/Apache).

FlexiPhoto allows users to upload photos from their web browser, assign keywords and other searchable criteria to each photo, group photos in collections, and much more. Aside from all of the searchable/dynamic behavior it provides, arbitrary web pages can call it for specific photos, which can have any scaling & compression (generated on the fly the first time, then cached) Contact me for more info.

**America Online - San Francisco & San Mateo, CA - May 1995 - June 1998**

**Senior Web Engineer**

Lots of work on [AOL.Com](http://AOL.Com), including user customization for the MyNews component. (AOLServer/Tcl)

In-house development of a tabbed Java Sports Scoreboard (Arena1)

Earlier projects (such as an early version of [www.SEMI.org](http://www.SEMI.org)) involved a lot of CGI scripting (launching searches and formatting output, registration, ordering, and statistics gathering), and parsing of SGML data (mostly in Perl).

**Autodesk - Sausalito & San Rafael, CA - September 1991 - May 1995**

**Software Engineer**

Implemented & debugged Proteus dialog drivers (much of the UI component for the Unix display driver process) for AutoCAD R12 (OpenLook/XView & Motif).

Extensive work evaluating the use of the Windows API and MFC in the Unix environment for AutoCAD R13 (using the Bristol product [Wind/U](http://Wind/U)).

Wrote a demo ADS app, urlink, which allowed one to tie entities/points in an AutoCAD drawing to URLs. Clicking on the points remotely controlled an X11 version of Mosaic (this was in late 1994)

Set up a web server for the Core Technology Group and wrote/gathered the content for it. This included a component repository, demos of components, WAIS access to internal developer information for AutoCAD, and much more. Wrote several CGI perl scripts for this, a few of which were a file/directory selection HTML widget, a generalized mechanism for properly initializing the environment and display of X11 based software component demos (with widely varying requirements), and simultaneous access to multiple WAIS databases.

Miscellaneous writing (on Internet Task Force, some benchmarking, R12 UI post mortem, other topics) and presentation (a cross platform project, Internet Tech Forum, and more).

**Island Graphics - San Rafael, CA - October 1989 - September 1991**

**Software Engineer**

Developed HPGL to IslandDraw filter.

Wrote most of the user interface (UI) for IslandPaint port from Motif to Open Look, using the XView toolkit. Main technical liaison with Sun in resolving XView issues. I also started the Usenet newsgroup alt.toolkits.xview during this time.

Designed and programmed most of the Unix functionality, and co-wrote the UI for IslandInstall, a Motif-based application which installed the Island Productivity Series. Initial platforms were Sun, HP, and Apollo. Designed and implemented all configuration/installation scripts for EPS (High-end prepress) software

**Lucasfilm / ILM - Marin County, CA - February - October 1989**

**System Administrator**

Installed, maintained, and upgraded Unix system software on various Suns (4.0 and 4.0.1). Upgraded Pixar software. Installed Alias 2.4 and OS 3.1D on SGI's for Computer Graphics Group.

Programmed major enhancements to film labeling application for editorial use. Designed and implemented a table-driven nightly backup scheme for all of ILM. Answered numerous Unix, Mac, and PC questions on a daily basis

**Island Graphics -San Rafael, CA - January 1987 - February 1989**

**Engineering Support Programmer**

Wrote a Sun Raster to HPLJ filter. Designed and implemented "Phonemail", a Curses-based (terminal lib) app used to send email messages throughout the company. Wrote "grabchars" (available from comp.sources.misc archives) to facilitate menu prototyping/interactive shell scripts.

Installed X11R4, Motif, OpenWindows, C++, PBM, PERL, B News, nn, and many other packages on Sun 3's and Sparcs. Installed system software on Suns, Sony NEWS, SGI's, and Apollos.

Wrote training materials and conducted classes on X11, Introduction to Unix, Mail and Vi, and Advanced Csh. Helped design a network-wide consistent naming scheme for company filesystem in 1988.

**Quality Assurance** Tested many 2D paint and animation programs (mainly Targa Tips M9, 16, 32, Vista Tips, Quanta VSC 2000 animation, and JVC VGS Paint).

**International Microcomputer Software Inc. (IMSI)**

**San Rafael, CA - September - December 1986**

**Technical Support Manager**

Helped customers work through programming problems with Turbo Halo (a graphics toolkit addon for Turbo Pascal) and other IMSI products such as the PC paint program Dr. Halo II. Concurrently beta-tested products.

**College of Marin**

**Kentfield, CA - Fall 1985 - Fall 1986**

**Lab Assistant**

Assisted students, faculty, and staff with Unix questions, and tutored Pascal, C, and Logo at the COM Science Computer Center. Graded Pascal class assignments for Prof. Fred Schmidt.

### **Broderbund Software**

**San Rafael, CA - October 1982 - January 1985**

#### **Testing, Production, Shipping**

Developed and organized the Testing Department. Identified many bugs in games and productivity software. Made numerous product design improvement suggestions.

### **Coursework**

#### **Santa Rosa Junior College - 2002**

CS & Math refresher classes

#### **College of Marin - Early 1980's**

An 'A' student in Pascal, C, Data Structures, and a directed study project ("Canvas", an animation editor for a Lear Siegler ADM5 Terminal RG512 card, written in Pascal).

#### **Additional:**

Numerous seminars and conferences over the years in areas such as BSD internals, X11 workshops, and an OLE/COM overview. Have attended several sessions, half-day, or full-day tutorials at conferences such as LinuxWorld, Internet World, O'Reilly Emerging Tech & Open Source, PhotoShop, and MacWorld. Weeklong MySQL class in 2002, taught by MySQL AB. Subscriber to Lynda.com and safaribooksonline.com. Constantly learning.

### **Other**

Contributer to "[Unix Power Tools](#)", an O'Reilly & Associates book. Contributer to West Coast Online newsletter (in 1995, I wrote an article "TV or the Internet?")

O'Reilly [ONLamp.com](#) article: [PHP and Heredocs](#)

I live in the San Francisco Bay Area. Some places of particular interest for short-term work include New York City, Chicago, Denver, Seattle, Vancouver CA, Sydney AU, and London/Oxfordshire/Edinburgh UK