

# Matthew Simon Ryan Cavalletto

(917) 502-7795 • simonm@me.com • www.cavalletto.org

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A senior full-stack web application developer, technology project manager, and agile team leader with over two decades of hands-on experience through all stages of the life-cycle of creating custom software products that enable success for Internet startups and data-driven organizations.

## CORE CAPABILITIES

- Ensuring that mission-critical new software development projects are completed successfully.
- Design of online systems, from business analysis to user interaction to technical architecture.
- Hands-on full-stack coding of modern web applications using open-source platforms and toolkits.
- Expertise with server-side application environments including Perl, Python, Apache, and MySQL.
- Production of responsive web interfaces using HTML 5, CSS 3, JavaScript, and web service APIs.
- Familiarity with operational issues and infrastructure scaling strategies required for high-traffic sites.
- Agile project methodologies and development coaching for new and growing technology teams.

## EMPLOYMENT HISTORY AND SELECTED PROJECTS

### **We Also Walk Dogs · Senior Software Engineer**

**Apr 2011 – Present**

- Full-stack developer for a hosted web service platform for political advocacy organizations.
- Customers include *MoveOn*, *NARAL*, *Mayors Against Illegal Guns*, *MercyCorps*, and *350.org*.

### **ActionKit.com**

*2011 – Present*

- Developed features for web application service and provided real-time technical support to clients.
- Collaborated with a fully-remote team using online services and distributed workflow processes.
- Updated client-facing web interfaces to include more dynamic HTML and JavaScript interactions.
- Added mailing-list hygiene features to migrate inactive addresses into a re-engagement cycle.
- Rewrote social media integrations to provide multi-generation share tracking and virality analytics.
- Created a JavaScript-driven point-and-click web interface to let users generate custom SQL queries.
- Technologies included Python, Django, jQuery, MySQL, Apache, Nginx, Twisted, Linux, and web services from AWS, SendGrid, Facebook, and Twitter.

### **MoveOn.org**

*2011 – 2015*

- Web application development for pioneering organizers of high-volume online political campaigns.
- Built a social media crowd-sourcing service with content workflow and community participation.
- Supported campaigners in targeting and delivering millions of personalized email messages per day.
- Developed an interactive point-and-click web console for querying databases and sharing results.
- Technologies included Perl, mod\_perl, Apache, MySQL, Linux, WordPress, Mason, jQuery, OAuth, Bootstrap, and web APIs from Facebook, Twitter, Google Analytics, Bit.ly, Embed.ly and others

### **Independent Contractor · Web Application Developer**

**Jan 2010 – Mar 2011**

- Freelance consultant and custom software developer.

### **Story Box**

*2010 – 2011*

- Provided guidance to startup's founder as new product and business plan concept was put together.
- Built initial prototype for video recording service using Perl, Mason, and the Nimbb webcam tool.
- This startup was subsequently accepted to the TechStars incubator program in Santiago, Chile.

FluidSelf.com

2010

- Designed and built prototypes for a personal social media aggregation service.
- Technologies included Perl, mod\_perl, Apache, MySQL, Linux, jQuery, JSON, REST, oAuth, oEmbed, and web APIs from Twitter, FourSquare, Bit.ly, Google Maps, Embed.ly, and others.
- Contributed additional Perl libraries to open-source community at <http://search.cpan.org/~evo/>.

Magnify Networks

2010

- Provided ongoing support to Magnify's technology team for one year following my departure.

**Magnify Networks · Co-Founder and Chief Technology Officer****Jan 2006 – Dec 2009**

- Lead technologist for a venture-backed Internet startup offering a video aggregation platform.
- Created a multimedia content management system that let clients quickly build sites to host and curate videos, and enabled publishing integrations and social interaction around that content.
- Customers included *The Weather Channel*, *New York Magazine*, *Rodale Magazines*, and *Etsy.com*.

*Startup Co-founder*

- Developed all code for initial release of product, then managed team and project as company grew.
- Helped pitch venture investors, sat on our board, and met clients to close and launch key accounts.
- Recruited in-house developers and independent contractors, and supervised all technical vendors.
- Enabled the company to bloom from a vague initial idea to one of the top two thousand web sites.

*Patents*

- Invented and patented a video meta-search and aggregation technique (US Patent 20080052630).
- Invented and laid the groundwork for a video pre-roll advertising patent (US Patent 8812956).

*Web Application Development*

- Developed prototypes and demo sites to define the product and get feedback from early customers.
- Built large application in Perl, Mason, Memcached, Apache, mod\_backhand, MySQL, SVN, Linux.
- Hand-coded web interface in HTML and CSS, and used Prototype to add effects and AJAX.
- Built wide range of optional features and customizable settings to support diverse customer types.
- Created custom search systems for local content items and for feeds retrieved from outside sources.
- Wrote technical and product documentation for investors, in-house developers, and customers.

*API and Service Integration*

- Supported dozens of web service APIs to integrate with customer data and third party services.
- Provided a REST API for client access, and exchanged user information via oAuth and custom SSO.
- Integrated with social media services via a Facebook app, Twitter API calls, and viral embed codes.
- Designed an iPhone application, built the back-end API for it, and supervised client-side coding.

*Systems Management*

- Managed technical operations for thousands of sites, serving million of dynamic requests per day.
- Processed user video uploads with MEncoder and On2Flix, and scaled images with ImageMagick.
- Automated updates to media files on Amazon S3, and sped up file delivery through caching CDNs.
- Dealt with data and traffic growth by optimizing application code and scaling server infrastructure.
- Managed databases and analyzed performance, scaled to multiple-master MySQL replication ring.

**Independent Contractor · Web Application Developer****Dec 2001 – Dec 2005**

- Project manager and senior technologist for consulting, development and support contracts.
- Created interactive web sites with e-commerce, content management and multimedia features.

- Optimized application performance and managed Internet server infrastructure as sites scaled up.
- Clients included *Evolution Robotics*, *Per Scholas*, *Columbia Presbyterian*, and *Stanford University*.

Stanford University, Diver Project

2005 – 2006

- Application design and rapid prototyping for effort to commercialize an academic research project.
- Enhanced web interface for a video mashup and markup application, and Identified new uses for it.
- Technologies included PHP, Flash and Flash Communication Server, AJAX, Apache, MySQL, Linux.

Professional Examination Service

1999 – 2005

- Application developer and integration consultant for a non-profit that administers licensing exams.
- Created public-facing secure web interface for registration and payment that interfaced with client's pre-existing application software and idiosyncratic legacy database service.
- Technologies used included Apache, Perl, Mason, ICVerify, DBI, ODBC, Progress RDBMS, Solaris.

WhenU.com

2000 – 2004

- Web server engineer and technology consultant for rapidly-growing online marketing firm.
- Optimized server-side web and database application software created by in-house developers.
- Managed server and network engineering for colo build-out from two servers to over twenty.
- Technologies included Apache, Perl, MySQL, Linux, load-balancing and cluster-management tools.

Columbia Presbyterian Medical Center, Pediatric Psychiatry Department

2001 – 2003

- System architect and senior developer for web-based medical records intranet application.
- Web interface allows clinical staff to rapidly enter, review, and update “forms” in patient charts.
- Adhered to various compliance requirements, including generating a paper trail for audit purposes.
- Technologies included Perl, MySQL, Apache, and FreeBSD, deployed on-site at their facility.

**Evolution Online Systems · Managing Partner****Oct 1994 – Nov 2001**

- Senior partner and lead developer for an internet technology and web development company.
- Project manager and senior technologist for development contracts with dozens of clients.
- Created interactive web sites with e-commerce, content management and multimedia features.
- Managed and mentored a team of up to a dozen Perl web developers and systems engineers.
- General business management including financial oversight and human resources administration.

CelebrateSomebody.com

1999 – 2001

- Senior developer and project manager building an e-commerce site for a custom printing service.
- Collaborative content system integrates users' comments and submissions with dynamic graphics generation and automated layout, with online previews and purchase of PDFs or printed books.
- Technologies included Perl, Apache, MySQL, PostScript, Adobe Distiller, CyberSource, and Solaris.

Chicago Academy of Sciences

1999 – 2000

- Lead software developer for an educational museum kiosk system with interactive courseware.
- Created content management system and supporting software that managed a network of 40 iMacs.
- Technologies included Apache, Perl, MySQL, Solaris, Mac OS X, NetBoot Server and Mac Manager.

Eyeglasses.com

1999 – 2000

- Lead developer and project manager for public e-commerce site with custom eyewear preview.
- Built a product catalog and e-commerce system and integrated a face-recognition toolkit to produce custom previews of eyewear on the face of user-uploaded photos or our stock models.
- Technologies used included Apache, Perl, DBI, MySQL, Visionics Facelt, CyberSource and FreeBSD.

Bluefly.com

1998 – 1999

- Project manager and developer for a major consumer retail site with high-fashion closeout sales.
- Created sophisticated product catalog system with live inventory management backend that let the company market odd lots of third-party merchandise and designer clearance with rapid turnover.
- Technologies used included Active Server Pages, VBScript, Microsoft Commerce Server, Microsoft SQL Server and Windows NT, with third-party managed servers and hardware load-balancing.

IntraNetics

1996 – 1998

- Lead developer for a shrink-wrapped intranet server software product made for small businesses.
- System was run on an office computer to provide employees with general-purpose private intranet apps, like contact lists, web calendars, and document sharing, even without reliable connectivity.
- Web-based management console allowed office IT staff administer the system easily and extend it by defining custom data sets for their own business applications without learning new web skills.
- Technologies used included Perl, FastCGI, ODBC, SQL Server, Windows NT, and InstallShield.
- Incubated by idealab!, then spun out as an independent company; later migrated to a hosted offering named Intranets.com, then acquired by WebEx and run as WebOffice until EOL'd in 2014.

Nature America Magazines

1995 – 1996

- Lead developer and project manager for a public web portal for monthly scientific journals.
- Custom built an early web-based content management and dynamic web publishing system.
- Enabled magazine advertising team to sell sponsored listings in web directory of industry contacts.
- Technologies used included Apache, Perl, mSQL, Solaris, Sun SparcServers, and a T1 connection.

**Independent Contractor · Information Processing Consultant****Jan 1991 – Sep 1994**

- Computer technician working for clients in financial services, publishing, and healthcare fields.
- Provided desktop publishing, LAN management, and custom database development services.
- Clients included Daiwa America, Brean Murray Foster Securities and Phantom Access Technologies.

Columbia Presbyterian Medical Center, Special Needs Clinic

1993 – 1995

- Primary developer of a medical records database for hospital clinic paperwork management.
- Enabled rapid statistical analysis across patient interaction histories to produce compliance reports for government agencies, and generated research data that strengthened key grant-writing efforts.
- Technologies used were initially FileMaker Pro on Windows 3.1, later migrated to Microsoft Access on Windows 95, and then scaled up with SQL Server, remaining in active use for twenty years.

**EDUCATION****Columbia University, Applied Technology Program****1993 – 1994**

- Professional development training including development methodologies and computer languages.

**Columbia University, School of General Studies****1990 – 1992**

- Undergraduate computer science foundations including calculus, algorithms, and data structures.

**The New School, Lang College****1989 – 1991**

- Undergraduate liberal arts curriculum with a focus on politics, cultural theory and philosophy.

**Stuyvesant High School****1985 – 1989**

- Member of the policy debate team at New York City's most selective STEM high school.

**REFERENCES AVAILABLE UPON REQUEST**