

# Steve Zimmers

CTO, Software Developer, Architect, Mentor

[stevezimmers@gmail.com](mailto:stevezimmers@gmail.com)

[stevezimmers.com](http://stevezimmers.com)

+1 416 709 1096

Toronto ON

Permission to work in US and Canada

## Summary

- 20+ years' experience
- Experienced technical team lead and mentor
- Creates well-designed, well-documented, reusable code
- Significant experience with framework-level and component development
- Development experience from embedded to server tier to client tier to mobile

## Recent Technologies

AngularJS, MeteorJS, React, NodeJS/ExpressJS, mongoDB, Flex3/AS3, Cordova, grunt, jasmine, istanbul, bootstrap

## Experience

| Soccer Innovation |  | 2016 - current |
|-------------------|--|----------------|
| CTO               |  | Toronto ON     |

Architect, lead developer, and team lead for startup in the sports education industry. Core product is a soccer e-learning app that features 3d models, personalized training sessions, and several engagement features. The app is a responsive, mobile-first design deployed as a webapp and, via Cordova, builds to iOS App Store and Google Play Store.

Managing a small team of developers, BA, QA, and artists. Established technical vision, technologies, and procedures. Coordinated with sports scientists, business, and development team to create and then extend the training methodology. Duties include planning all sprints and releases, handling all deploys, performance tuning, and monitoring servers.

Technologies include MeteorJS, React, Cordova, [clara.io](http://clara.io), Cloudinary, Python.

| Digital Primates |  | 2007 - 2015 |
|------------------|--|-------------|
| Senior Developer |  | Chicago IL  |

Technical team leader, developer, and occasional project manager in small, agile consulting firm. Concentration in frameworks and component development across industries, including medical, manufacturing, and financial.

Additional duties included architecture and design across firm projects, mentoring junior developers, reviewing code and architecture across firm projects, running the recruiting effort, helping create and manage the training efforts, estimating projects, reviewing statements of work, reviewing employees, defining project management, and code review tools and processes.

### Education Industry Manufacturer (3 mo)

After architectural review, helped identify key areas to improve adoption of enterprise SFDC/Heroku application suite. Led small team in development, involving introduction of several REST endpoints in Force.com application and addition of code to automate setup of products for dynamically generated e-commerce sites.

### Education Industry Manufacturer (8 mo)

Led small team in rescue project for a shelved bulk ordering application. Main goals were performance improvement and bug-fixing. Oversaw overhaul of unstable Javascript webapp to implement single-page application (AngularJS). Oversaw efforts to simplify REST endpoints and returned data with Java server tier. Directed tasks for client database,

SSIS and Oracle teams. Application went into internal production and exceeded all performance goals, including time to launch, and reducing minutes-long queries to under 5 seconds.

#### **Education Industry Manufacturer (7 mo)**

Bug-fixing on and feature addition to large, internal-facing enterprise order management application. Added feature to upload images from Flex client to Adobe CQ5 through Java server.

#### **Food Industry Manufacturer (2 mo)**

Created ExpressJS server with REST endpoints to accept incoming XML files as specs for equipment and service calls and save them to SQLServer database. Server ensured the request came on SSL, authenticated, validated the XML, saved an audit copy, converted it to JSON, then did necessary select/inserts to save it. Managed two new developers on their first project.

#### **Healthcare Company (6 mo)**

Architected AngularJS framework for suite of mobile applications to store encrypted HIPAA data on devices and laptops and allow healthcare workers to authenticate and work offline. Created grunt-based development environment that targets multiple platforms: Cordova for iOS, Android and Windows Phone, plus webapp environment. Created recursive and performant, JSON-driven dynamic clinical form. Framework code coverage nearly 90%. Worked with client developers to train them on development environment and framework.

#### **Food Industry Manufacturer (1 yr)**

Helped design and implement an enterprise system for managing rollout of new products and service contracts. The platform allows for dynamic addition of entire rollout and service projects, then create reports and collect performance data across them. Worked on database design (SQLServer, Mongo), server (C#, .NET, WFC, WWF, REST) and client (C#, Javascript, Randori, HTML, CSS, GuiceJS). Client is deployed in browser on HTML/CSS/JavaScript. Managed three developers.

#### **Large Media and Content Streaming Company (4 mo)**

Led a small team creating separate phone and tablet applications with shared libraries for streaming live video and associated functions, including comments and related stories. Applications built in Flex/AIR/OSMF with deploy targets to iOS and Android. Applications featured custom view navigation and animation solution for performance. Communication to JavaScript servers used WebSockets, with custom integration for intelligent management of open connections.

#### **Fortune 500 Financial Institution (5 mo)**

Part of small team working on client tier (Flex3) of client-facing enterprise reporting application using Oracle WebLogic. Implemented major, company-wide feature for improvements to international date handling with zero defects. Also restructured client projects and CSS to enable white-labeling and assisted debugging/fixing Adobe LCDS failover logic.

#### **Online Photo Sharing Site (6 mo)**

Designed and built major client-side feature to site (Flex4). Helped architect and design client/server solutions for startup time and publish/subscribe updates. New startup architecture allowed app to instantiate and show photos within three seconds.

#### **International Healthcare Company (4 yr)**

Led Flex3/Flex4 frameworks/components team to support client-side development of massive hospital application. The frameworks and components allowed the domain application team to build thousands of screens with built-in binding to XML objects for ease of loading and saving. The framework provided for easy form validation. The components and frameworks supported right-to-left text and layout, Hijri calendars and language-specific sorting and filtering, including Arabic. Frameworks included over 10,000 unit tests. The system was deployed to numerous international markets. Using the codebase, worked with Adobe to help optimize their compiler. Some fixes were contributed back to the Flex framework. Managed up to 7 developers.

|                      |                    |
|----------------------|--------------------|
| <b>Self-employed</b> | <b>1999 - 2007</b> |
|                      | Chicago IL         |

Assisted several small companies with IT concerns, including hardware/software maintenance, some programming, some budgeting/purchasing, some website design and implementation. Ran hosting company, produced sound for theaters and radio.

**Mail Order and Retail Company (4 yr, 2 mo)**

System administrator and tech resource for multi-city food retailer. In addition to systems and network administration duties, advised on technical direction, performed end-to-end testing of e-commerce and internal systems, developed Miva e-commerce site, and made IT budgets.

|  |                    |
|--|--------------------|
| <b>ISA Services</b>                        | <b>1995 - 1999</b> |
| <b>Co-Owner, Senior Software Architect</b> | Chicago IL         |

Technical manager on client projects, involved in all phases of server-side development, plus system architecture. Managed firm and client developers. Technologies included C++, Java, CORBA. As human resources manager, defined and ran the hiring processes and evaluation processes. As co-owner, served as board member and president.

**Fortune 500 Financial Institution (1 yr, 5 mo)**

Led frameworks team for a multi-tier securities lending system implemented in Java. Re-architected data tier to eliminate most data issues, improve performance and simplify deployment. Prototyped a replacement server tier with Persistence PowerTier/EJB. Created a make build environment to bring build times from 40 minutes to 30 seconds.

**Derivatives Clearing Firm & European Bank and Trading Firm (10 mo)**

Managed infrastructure team for major reimplementations of an options clearing system for a European exchange. The transaction-based clearing system was distributed via a publish-subscribe reliable bus (Orbix+ISIS) across Solaris and NT.

**Derivatives Clearing Firm (1 yr, 11 mo)**

Architect, designer, and lead developer for two stock and derivative pricing systems. The first was a real-time system using Reuters' Triarch middleware, including consumption and production of prices. C++ with NT client on Solaris server. The second system used CORBA to expose three pricing systems and used a Unix-hosted server to allow NT clients to price options baskets cooperatively. Defined CORBA-based architecture for apps to request and shared data. Created an imake-based build system to simplify build process for developers and automated build system. Managed two developers.

|                            |                    |
|----------------------------|--------------------|
| <b>Andersen Consulting</b> | <b>1992 - 1995</b> |
| <b>Senior Consultant</b>   | Chicago IL         |

Member of prototype technology-focused team that eventually became model for how Andersen hired experienced developers. Technologies included C, C++. Consulted on multiple clients across industries. Designed and managed a C training course for new hires. On projects, often led design and development efforts, plus code and architectural review.

**Large British Bank and Trading Firm (1 yr)**

Helped develop C++ trading system on Solaris. Designed and developed automated testing facility for risk management tool. Wrote massive sed script to convert FORTRAN programs to C++. Managed one developer.

**Internal Project for Training Facility (5 mo)**

Manager and lead developer of three person team that created a C training course, then helped manage the rollout to hundreds of new hires.

**Large Petro-Chemical Engineering Firm (1 yr, 4 mo)**

Part of small team that developed application framework for specifying industrial equipment (C++/Unix). Helped develop two applications that used the frameworks.

**Northrop Corporation**

**1989 - 1992**

**Senior Engineer**

Rolling Meadows IL

Technical lead on avionics test sub-system for manufacturing assembly line. Performed development and hardware and software integration for embedded electronic countermeasures system. Technologies included C and Z80 assembly. Secret clearance.

## **Education**

**Purdue University, West Lafayette IN**

B.S., computer science, 1988

## **Publications**

"Breaking Out of the Web Browser With Adobe AIR" (ISBN 978-0321503565), contributing author