

Matthew Litwin

Software Engineering Manager and Lead

- Lead for a diverse [Full Cycle](Manage Full Cycle Team <https://medium.com/netflix-techblog/full-cycle-developers-at-netflix-a08c31f83249>) engineering team
 - Backend, front-end, infrastructure and support.
 - Full time, contractors, and vendor management.
- Plan and design and document APIs and systems
- HTML5/JavaScript
 - Angular applications
 - Plain-old JavaScript applications
- C / C++ Windows and OS X Application Development
- Math Education Software

Experience / Work History

Started with Key Curriculum Bought by MHE / School Group - web applications
Moved into Digital Projects Group - Lead / Manager Software Engineering.

Managed vendors Lead developer managed team FTEs and contractors

KCP Technologies

03/22/1999 to 07/31/2012

Junior programmer to Senior Software Engineer

- Technical lead on HTML5 Web development for Sketchpad
- Technical project management, several direct reports
- C, Windows MFC, and Mac Objective C programming on The Geometer's Sketchpad
- Mac and Windows programming on FathomTM Dynamic DataTM Software with an in-house cross-platform framework

Skills

- Practices
 - Scrum, Agile Programming, XP, Pair Programming
- IDEs
 - XCode, Visual Studio
- Source Control
- git (svn, CVS)
- Issue Tracking
 - JIRA, Bugzilla, Trello
- Content Management Systems
- MediaWiki

Programming Languages

- HTML5/JavaScript Application Development
 - An HTML/JavaScript Sketchpad Document Viewer
- C
 - Platform independent code in Sketchpad<
- C++
 - Fathom, and Windows / MFC specific code in Sketchpad<
- Objective C / Swift
 - OSX version of Sketchpad
- Perl, PHP, bash
 - Scripting goodness and miscellaneous CGI glue<

Projects

The Geometer's Sketchpad

The Geometer's Sketchpad is an interactive Dynamic Geometry™ application, available for Windows, Mac, and iOS. I worked on the most recent major version, coding considerable portions of the Windows front end, also implementing core geometric and utility algorithms. I am also the tech lead for the development of an HTML5/JavaScript viewer for Sketchpad documents.

Fathom

Fathom was a Dynamic Mathematics application for teaching Data Analysis and Statistics, available for Windows and Mac. I coded using an in-house cross-platform C++ framework, including HTTP download components, and mathematical algorithms (such as multiple linear regression, and primality testing).

Education

University of California, Santa Barbara MS Mathematics 1997

University of California, Berkeley BS Mathematics 1994