# Matthew Litwin

Software Enginering 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

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

Manged 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 Fathom™ Dynamic Data™ 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