

## Summary

Leader, Computer Scientist, and Software Engineer with 19 years experience solving problems by designing and building quality software in companies and teams of all sizes and academic research roles

- History of improving team productivity and efficiency by orders of magnitude
- Strives to develop keen insight to find true, simple solutions to complicated, real world problems
- 18 years Java development experience as primary language
- 16 years providing technical team leadership
- 11 years providing university computer science education
- 4 years managing engineering employees

## Experience

**Sr. Software Engineering Manger/Architect, BAE Systems**, ES - Burlington, MA/Hudson, NH: 09/2004 - present

- Direct technical leadership or functional management of 25 software engineers across multiple sites
- *Currently responsible to Software Director of 160 engineer organization - Technical Lead: Map Display*
- Hands on lead and architect in program of 65 software engineers
- Saved \$2 million during initial development of Map Display coordinating program management, system engineering, co-contractor, users, and customer
- Captured portion of primary mission equipment from competitor comprising 50% of the product screen real estate
- Recovered 2 month schedule slip upon joining Map team delivering features 20% ahead of first increment schedule
- Reduced defect resolution and regression testing overhead of feature rich Map Display from 1 week to 4 hours
- Led addition of 30 Map features, requirements through integration and test, on schedule and within budget
- Initiated and advised 2 sponsored university projects coordinating legal, business area, and academic departments
- *Responsible to Business Area Director of 60 engineer organization - Productizing Lead: Tracking and Fusion*
- Leveraged disparate tracking and fusion capabilities over 14 different code bases
- Instituted mechanisms for maturation of research developed capabilities in a production code base
- Aligned source control and build infrastructure to support major, minor, and fix releases to multiple programs
- Inserted automated testing, coverage, static analysis, run time performance, and dependency metrics
- Reduced time to regression defect identification from 4 weeks to 1 day
- *Capability Lead: UAV Auto Routing High-Speed Emergency Re-Planner in program of 25 engineers*
- Increased code review effectiveness from 1 to 10 major defects found across all program projects
- *Chief Software Architect: Future Combat Systems Preparation and Planning Services Fires And Effects Planner*
- Customer appointed role leading 25 engineers from 2 companies on East and West coasts
- Achieved reversal of deployment approach of 300K line code base in single 6 month spiral with no cost or schedule impact to previously planned tasks supporting customer direction change

**Adjunct Instructor, Worcester Polytechnic Institute (WPI), CS Department** - Worcester, MA: 05/2004 - present  
Courses: [CS 525W Web Ware](#), [CS 3043 Social Implications Of Information Processing](#).

**Research Scientist/Engineer, Bioengineering Institute (BEI), WPI**: 09/2002 - 08/2004

- Cultivated business opportunities for novel data model and user interface technologies, Provisional Patent awarded.

**Research Assistant, Center For Research In Exploratory Data And Information Analysis**, WPI: 09/2002 - 12/2002

- Conducted research for project funding proposals and preparation for conferences. Created and maintained website.

**Geo. I. Alden Fellow**, BEI, WPI: 02/2002 - 09/2002

- Authored MA Norfolk County Sheriff's Office technology plan, new data model and user interface technologies.

**Design Engineer, EMC Corporation** - Hopkinton, MA: 06/1998 - 10/2001

- *Performance Analyst: Characterize and optimize EMC Data Manager (EDM) Backup Restore Solution*
- Realized twentyfold team productivity increase through initiating and leading continuous improvement effort
- Provided performance white papers, inference engine expert system, and support to sales and field engineers

**Software Engineer**, Scope Communications - Marlborough, MA: 1997 - 1998 - Created intelligent GUI widgets.

**Software Consultant, 3Com** - Marlborough, MA: Summer 1996 - Implemented a manufacturing quality database.

## Skills

**Technical:** Product Size Estimation, Schedule Planning, Requirement Derivation, Algorithm, Architecture, Design, Implementation, Testing, Integration

**Tools:** Java, JSF, JSP, JavaScript, XML, HTML, XHTML, UNIX, Linux, BSD, Mac OS X, Windows NT/95 through 7, Jenkins, Eclipse, Subversion, ClearCase, Rational Rose, Test Track Pro, [Weka](#), [Emacs](#), Java SDK, Apache [Web Server | [Tomcat](#) | TomEE | Shiro | Log4j], Primefaces, CesiumJS, Google Earth Plugin, Coverity, Fortify, MS Office, *Previous Experience In:* C++, C, Prolog, Scheme/LISP, LaTeX

**People:** Recruiting, Behavioral and Technical Interviewing, Performance Leadership and Management, Mentorship, Career Development, Salary Planning, Tasking

**Process:** Continuous Improvement, CMMI Level 3, Effective Technical Product Review, Meeting Facilitation

## Education

**PhD in Computer Science**, Worcester Polytechnic Institute (WPI) - Worcester, MA - In Progress

**Master of Science in Computer Science**, WPI - 2004 **Thesis:** Time Sequence Association Rules

**Bachelor of Science in Computer Science**, WPI - 1998 with [High Distinction Thesis](#): Machine Vision Billiards

## Publication

[Mining Expressive Temporal Associations from Complex Data](#), Machine Learning and Data Mining in Pattern Recognition: 4th International Conference, MLDM 2005, Leipzig, Germany, July 9-11, 2005. Proceedings.