CARMINE MANGIONE
106 Lewis St, San Diego, CA 92103
619-861-2184

EDUCATION:

Cal Poly, Pomona BS (Spring 1984) Aerospace Engineering

Cal State, Long Beach MS (Spring 1991) Computer Science

University Of California, Irvine MS (Spring 1994) Computer Science

University Of California, Irvine Ph.D. (leave of absence) Computer Science

SUMMARY:

Impassioned entrepreneur, manager, and executive who creates successful teams and companies. Inspirational engineering vice-president, director, software architect, team leader and technologist that consistently delivers successful commercial products from inception through maintenance using agile methodologies.

Systematic and dedicated researcher, mathematician and inventor who has discovered powerful algorithms in distributed computing, data compression and artificial intelligence. Communicator, lecturer and writer whose publications include articles in CIO Magazine, JavaWorld, NCWorld, Directions on Microsoft, and a long running column in Enterprise Developer Magazine. Mentor level developer in many technologies including Java, AJAX, EJB, Web Services, C#, .Net and C++.

QUALCOMM, SAN DIEGO, CA (JANUARY 2007 TO PRESENT)

Executive Consultant: Taught and coached agile methodologies at every level of the organization.Worked on defining agile processes and metrics for Qualcomm's software quality initiative. (Java, XP, Machine Learning, SQL, RDBMS, WebDav, J2EE, GWT, Swing, SCRUM)

VERIZON BUSINESS, SAN FRANCISCO, CA (JANUARY 2007 TO PRESENT)

Chief Architect: Transformed a large, highly talented but unmotivated and unproductive team with dated skills and technology infrastructure. Motivated the team members by creating a culture of success and collaboration. Mentored new technologies, advanced algorithms including machine learning, and introduced new web technologies to create highly praised products.

Introduced and coached the SCRUM agile process. (Java, XP, Machine Learning, SQL, RDBMS, WebDav, J2EE, GWT, Swing, SCRUM)

BRIDGE MEDICAL, SAN DIEGO, CA (JULY 2004 TO JANUARY 2007)

Chief Technologist/Director: Managed, mentored and grew a diverse team of more than 20 engineers to create two new versions of Bridge's world leading bedside medication compliance application. Created a process that integrated the embattled PM, QA and development teams and over came two years of missed deliveries and poor performance. Inspired all teams to come together to create market revolutionizing IV pump integration.

Created an agile methodology that surpasses the rigorous standards of both ISO 9000 and 510 K. Designed a zero defect process where 99% of all use case defined acceptance tests are fully automated and run every two hours. As a result, nearly all regressions in the fast moving development code base are found and fixed before reaching QA. Developed individual and team goals, training programs and review criteria to create a world class team that is now one of the most productive throughout Cerner.

Set engineering and architectural standards that produced increased speed of development throughout the life-cycle by containing cost of change. Organized and created deployment, scaling, escalation procedures for both internal teams and geographically distant and delivered technology and roadmap presentations to customers and senior executives. (Java, XP, Swing, SQL, RDBMS, WebDav, J2EE, AJAX, OOD, Patterns)

FAIR ISAAC, SAN DIEGO, CA (MARCH 2003 TO JULY 2004)

Principal Architect: Created a software process, Extreme Programming Research (XPR) that allows advanced technology groups to harness the development and software produced during research without slowing progress. Under normal approach to research this software was usually considered throw away. The new process injects agile methodologies such as refactoring, just in time design and programming by intention with full unit tests to ensure that the resulting code is well designed and correct. Velocity increases are realized by nearly eliminating debugging from most research processes and leveraging existing code. Presented process in talks throughout company.

Lead the research and development of advanced artificial intelligence algorithms including clustering, co-occurrence, and neural nets using XPR. Implemented the SPE algorithm, detected and corrected problems with convergence of the original algorithm.

The process led to the creation of a datamining framework based on co-occurrances that minimizes the amount of effort required to process an additional customer. (Java, XP, Machine Learning, SQL, RDBMS, J2EE, OOD, Patterns)

X-SPACES, INC. SEATTLE WA (SEPT 2001 TO MARCH 2003)

CTO: Developed a unique peer to peer media distribution and clubs platform with chat, file sharing, threaded discussions, photo albums and video streaming. Assembled engineering team and used the Extreme Programming software methodology to build a

solid product with a part time staff. Recruited top business talent and led the development of a solid business and marketing model for the product. Managed all phases of development and deployment. Acquired first customer and delivered wildly successful alpha version of the product.

Designed and implemented an efficient, reliable connection acquisition and maintenance protocol that ensures a well connected, coherent peer to peer network with a minimum of redundancy.

Designed and implemented an affinity based message strategy that allows the peer network to scale to large sizes without becoming overwhelmed in search and strategy messages.

Founded and ran a successful training firm with a unique curriculum based that enables organizations to reduce cost and risk in software projects using existing resources. Created highly praised course materials in Java, EJB, agile methodologies, object oriented design and databases. Acquired several Fortune 500 customers.

SEATTLE UNIVERSITY, SEATTLE, WA. (MARCH 1996 TO DECEMBER 2002)

Professor: Designed and taught graduate level courses in Relational Databases, Object Oriented Design (OOD), UI Design, Parallel and Distributed Computing and Advanced Java Programming. Developed course work that unifies Relational Databases, Object Oriented Design and UI Design around the first principles of design. Created a very popular OOD curriculum that merged OOD patterns Reil's OOD heuristics, refactoring that demonstrates how a design can evolve as an emergent property of requirements.

BOOTLEG NETWORKS, SEATTLE, WA (SEPT 2000 TO JULY 2001)

Chief Architect/VP Engineering: Led engineering in the creation of an end-to-end media management system, Media Booster. The product catalogued and managed and previewed media in most formatsand managed terabytes of content with millions of entries. Used the Extreme Programming (XP) process to deliver a functionally complete system in 6 months by focusing on the real needs of the customer. Responsibilities included: recruiting and leading a world class engineering team of more than 20 engineers, evaluating emerging implementation technologies, and integrating operations, production and facilities into a coherent focused team, creating presentations and pitches for venture capitalists. (Java, XP, J2EE, OOD, SQL, XML, RDBMS)

EXCITE@HOME, SEATTLE, WA (MAY 1997 TO SEPTEMBER 2000)

Principal Architect: Lead the architecture and development of Excite Clubs of more than 20 engineers. Created a development process that allows a live production system to be updated without service outage or data loss. Developed a multi-tier, redundant application server. Used Extreme Programming (XP) to increase productivity and product quality.

Designed custom m iddle tier cache architecture, efficient parallel algorithms and database layer that allowed scaling to at least 100M page views per day. Created stochastic loading client that simulated real world loading to find and eliminate bottle necks. Invented new algorithm that combined bloom filters with a new tree structure that efficiently tracked which content had been viewed by users. (Java, XP, J2EE, OOD, RDBMS, SQL, XML, HTML)

REDMOND COMMUNICATIONS, REDMOND, WA (APRIL 1996 TO MAY 1997)

Chief Scientist: Researched and wrote technical articles for leadiing technical journal of Microsoft technologies .

UNIVERSITY OF CALIFORNIA, IRVINE (SEPTEMBER 2002 TO APRIL 1996)

Ph.D. Candidate: Studied machine learning algorithms and created a simulation of the CA-3 layer of hippocamus .

MIDISOFT, REDMOND, WA. (MARCH 1992 TO JUNE 1993)

Lead Developer: Implemented an award winning professional notating MIDI sequencer (MIDI, C++, OOD).

MICROSOFT, REDMOND WA. (JULY 1991 TO FEBRUARY)

Senior Consultant: Constructed a compiler that generates a fully qualified SQL statement, resolving all join conditions (C++).

MIDCOM, ANAHEIM HILLS, CA. (JANUARY 1990 TO JULY)

Senior Consultant: Developed and coded advanced algorithms for Space Station Costing Model (C++, Open GL,. ß

SAIC, REDONDO BEACH, CA (AUGUST 1986 TO JANUARY)

Developer: Designed and implemented an end-to-end 3D visible light simulation (C, C++, GKS, FORTRAN).

ROCKWELL INTERNATIONAL (JUNE 1984 TO AUGUST 1986)

Engineer: Satellite Systems Division: Performed nuclear survivability analysis on B1-B (FORTRAN).

References available upon request