▶George J Carrette

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Objectives

To help people solve difficult problems through the amplification of human intelligence.

Skills

- Full software product lifecycle from requirements management to pre-sales, deployment, and support.
- Deep understanding of multiple generations of computer hardware.
- Real-time dynamic storage and multi-threaded programming.
- Advanced SQL and optimization using Oracle, Sybase, SQL Server, and DB2.

Experience

Senior Developer (2006 – May 2011)
Monster Worldwide (Maynard MA)

Designed and implemented an application to pull job listings and employer recruiting requirements from multiple *Job Board* databases and serve them as targeted advertising by dynamically classifying viewer characteristics to match heuristic templates that are compiled into the intermediate languages of Microsoft CLR and SQL in order to execute the searches as quickly as possible.

The application, launched as Monster Career Advertising Network (CAN) is currently the fastest growing product within Monster Worldwide

Senior Technologist (2003 – 2006)
Aras Corporation (Lawrence MA)

Lead developer on the project to re-platform the company's product on the Microsoft CLR and SQL SERVER 2005. Significantly improved the skills and productivity of the efforts of an offshore development team by focusing them on testable results and rapid build turn around and enhancing the build process to include the database under source control. Created the scripts for converting existing customer's applications to the new platform, supporting the field staff from the home office and traveling to customer sites to help successful product roll outs..

Independent Consultant (2002-2003)

Worked for Northrop Grumman to help complete some contracts, and worked directly for some previous customers, including Varian Semiconductor Equipment Corporation. Expert witness in a patent litigation for Heller Ehrman LLP. Helped out on a port of an insurance company's huge COBOL application from the Wang VS to the SUN SPARC platform. Implemented a Business Workflow graphical editor in Java/Swing.

Senior Principal (1998 – 2002)
Northrop Grumman/TASC (Reading MA)

Enhanced the EIGNER PLM Product (now part of Oracle) to meet the auditing and other security requirements for DOD Nuclear Reactor Program. Traveled to vendors home office in Germany to communicate requirements, build good will, and judge development efforts. Implemented a tracing and performance analysis tool that was able to identify small changes that improved customer application performance by a factor of 2 generally and by a factor of 10 when running in the highest security mode Recognized by the Satellite Intelligence business unit for my work on an XML information gateway that used an expressive calculus to perform transformations

Software Architect (1996 – 1998)
Information Access Company (Cambridge MA)

Helped the Corporate Division produce 6 new products by introducing a productive web applications implementation framework. Gathered the business requirements for and designed a new product fulfillment and license administration application to support the new product lines.

Project Leader for Web Applications (1995 – 1966)
News Corporation (Cambridge MA)

Designed a template-oriented web tool for use by the platform engineering group, presenting it at the 1995 World Wide Web Conference Worked on the committees responsible for the information flows within the service. Implemented the server components of the logon, including key exchange and dynamic assignment of client internet service provider. Helped the database group on 64-bit architecture and data replication scale out issues. Helped the server engineering with kernel bugs that needed to be fixed by working directly with the vendor's developers.

VP of Research and Development (1988 – 1994)
Mitech Corporation (Action MA)

Implemented the development environment and compiler for an expert system. Patent 4,975,865 *Method and apparatus for real-time control*. Hired product support staff. Created the external data interface library, implemented several interfaces.

Lecturer (1988 – 1989 concurrent)
Biomedical Engineering Section, Boston University (Boston MA)

Developed instructional materials and taught *Artificial Intelligence Programming*, course EK-201.

Lead Developer/Architect (1987 – 1988)
Gigamos Systems (Lowell MA)

Ported the PICON expert system from the LMI proprietary hardware (lisp cpu sharing a memory bus with a 68010 Unix cpu) to a more open system combining Symbolics hardware networked with data acquisition servers running MS-DOS, VAX/VMS and Sun Unix. Created the portable binary format for the knowledge base storage and TCP-IP communications layer.

Consultant (1987)
Artificial Intelligence Section, Arthur D. Little (Cambridge MA)

Implemented expert systems for clients using the platforms KEE and ART.

Software Engineer, Manager of Software (1983-1987)
Lisp Machine Inc. (Cambridge MA)

Used the Gabriel Lisp Benchmark series to coordinate the work of other developers to optimize system performance. Worked on all areas of the operating system, microcode, compiler, and hardware of the LMI product line. Optimized file system directory update performance, implemented Sun NFS protocol client and server. Implemented TCP/IP stack, XDR, RPC, FTP, SMTP, TELNET etc. Designed new hardware instruction and implemented a timesharing mode for the system. Did pre and post-sales support for applications including Prolog, PICON, Macsyma, and Ada.

Consultant (1983-1986 concurrent)
Lawrence Livermore Laboratories, B Division (Livermore CA)

Worked on a compiler for a domain specific programming language with adaptations for proprietary simulation codes.

Software Engineer, Sponsored Research Staff (1981-1983)
Massachusetts Institute of Technology (Cambridge MA)

Implemented a graphical teaching aid and electrical field solver for used by students. Optimized the memory footprint and user interaction for the Lisp platform used in the introductory programming course under the TOPS-20 timesharing system. Worked on the VAX/NIL implementation of Lisp, accomplishing the bootstrap of the system off the PDP-10, the port of the Macsyma application, and the packaging and distribution to first 100 customers. Implemented computations for plasma physics research.

Education

BS Mathematics, Massachusetts Institute of Technology (1981)

▸ Under the supervision of the Electrical Engineering department, enhanced the Macsyma compiler so that non-experts could use it to optimize the performance of all programs in the user contributed libraries.

PUBLICATIONS/PATENTS

USPTO 4,975,865 Method and apparatus for realtime control.

Burke, G.S.. Carrette, G.J. and Eliot, C.R, "NIL REFERENCE MANUAL" MIT-LCS-TR-311. January 1984.

Carrette, George J. "VAX/NIL Port of MACSYMA", 1984 Macsyma Users Conference.

Harten, Leo P and Carrette, George J. "The Share Library in DOE-MACSYMA" Proceedings of Robex 1985, NASA/Johnson Space Center and Instrument Society of America.

A. Bers, K. Ko, V. Krapchev, A. K. Ram, V. Fuchs, G. Carrette, A. Della Fera, L. Harten, and K. Theilhaber, "Nonlinear Wave Interactions - RF Heating and Current Generation in Plasmas," No. 124, January 1982, pp. 112-118.

Carrette, George J. "SIOD" an open software package.

Carrette, George J. "CRASHME" a system robustness exerciser.

Carrette, George J. and Polanksy, Robert, "Using HTML templates in Web Applications" December 1995 World Wide Web Conference. http://www.w3.org/Conferences/WWW4/Poster.html and http://people.delphiforums.com/gjc/chtml.html on the web.