

Anthony Cassandra

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Objective

Seeking a technical leadership position with decision making responsibilities. Preference for positions with interesting problems to be solved and working on projects with a direct consumer impact.

Employment

Bazaarvoice, Inc.

March 2014 through Present

Senior Staff Software Engineer

Austin, TX

Responsible for software architecture, design and strategy directions for product catalog, data services and data sciences.

Independent Contractor

August 2013 through Present

Consultant

Austin, TX

Technical adviser to early and mid-stage start-ups. Architecture design, strategic guidance, requirements acquisition.

Pronto, LLC

March 2005 through March 2013

Chief Technology Officer

New York, NY

On promotion to the role of Chief Technology Officer, I was responsible for a team of over 35 people across 6 different departments. I over-saw the design, development and launch of two new profitable web sites as well as being principally responsible for creating an entirely new product line. The aging, legacy start-up infrastructure was redesigned and upgraded to a service-oriented architecture (SOA) while a major site redesign was in progress. New processes were implemented for planning and managing projects, people and budgets which helped Pronto evolve into a more mature technology company.

Skills: *Technical management, project management, technical budgeting, software architecture, service-oriented architecture (SOA), project planning, strategic planning, financial planning, portfolio management.*

Chief Architect

Austin, TX

was responsible for overseeing all new software system designs and implementations. Additionally, I was the architect and chief developer on our distributed image serving platform, which stored hundreds of millions of images, serving millions of images per day.

Skills: *Technical management, project management, software design, software architecture, Java, service oriented architecture, Berkeley DB, Apache Cassandra, PHP, CSS, HTML, JavaScript, Perl, XML, JSON, GNU/Linux.*

Vice President, Search and Data

Boulder, CO

After many successful development projects, I was promoted to the role of VP of Search and Data which made me responsible for creating, managing and inter-team coordination for all search and data projects and a few search-related, front-end application projects. This meant constant coordination with all our Product, Development, Data Quality, Sales and Marketing Teams. These projects helped to continually enhance the quality of our search and data, as well as improve the site economics resulting in the company reaching profitability within 3 years of its creation.

Skills: *Technical management, project management, software design, software architecture, Java, PHP, Python, CSS, HTML, JavaScript, Perl, XML, XSLT, JSON, MySQL, SQL, HTML, CSS, Firefox add-ons, DHTML, AJAX, XPCOM, XUL, XPATH, GNU/Linux.*

Senior Scientist

Boulder, CO

I was part of the founding team at Pronto, serving in the role of Senior Scientist and working on data mining and data analysis projects. I was one of a team of 4 people that designed and built the entire back-end data analysis and distributed processing pipeline for Pronto.com. This system was capable of continually crawling web sites, extracting data, processing feeds and analyzing the data for over a hundred million product offers from tens of thousands of stores each day.

My role expanded to include being responsible for the architecture and project management of the service layer that serves the front-end applications and web sites and has scaled to handle Pronto.com's traffic of tens of millions of search and product requests per day. I was also the sole designer and developer of the API and server platform for syndicating our product data to external partners.

I was then brought into the web application development team to architect, lead and manage a new initiative for adding social shopping features to Pronto.com's web site. At its peak, this project required coordinating a team of 10 product development people and involved requirements gathering from our Sales and Marketing Teams.

Skills: *Feature extraction, Bayesian classification, software design, software architecture, Java, PHP, CSS, HTML, JavaScript, perl, Bash scripting, CRON, SSH, Apache webserver, Tomcat application server, XML, XSLT, JSON, MySQL, SQL, HTML, CSS, Firefox add-ons, XPCOM, XUL, XPATH, DHTML, AJAX, GNU/Linux, system administration, Red Hat.*

University of Texas at Austin **Research Fellow,**
Department of Psychology
Austin, TX

May 2004 through June 2005

- *Research, design and development of mathematical models and algorithms used in human spatial navigation and decision making research studies.*
- *US Patent No. 7,620,493, "System, Method and Apparatus for Providing Navigational Assistance", co-authored with Brian J. Stankiewicz, awarded November 17, 2009.*

Skills: *Research and development, Java, Python, decision theory, probability theory, optimization, navigation aids.*

Independent Contractor

May 2004 through January 2005

Consultant
Austin, TX

- *Design and development of graphical monitoring interface for visualization of distributed agent network communication. Implementation in Java for European Commission Joint Research Centre's as part of EDEN Inland Water Research Project.*

Skills: *Java, user interfaces, visualizations, message-based systems, agent-based systems.*

Telcordia Technologies, Inc.

June 2003 through December 2004

Consultant
Austin, TX

- *Design and development of statistical models to improve the robustness of military logistics in a distributed agent architecture.*

Skills: *Java, distributed agents, stochastic modeling, defense industry logistics.*

St. Edward's University

August 2002 through December 2004

Assistant Professor of Computer Science
Austin, TX

- *Taught undergraduate classes in computer architecture, computer organization, assembly language, software engineering, mathematical optimization, data structures, algorithms, system administration, Java, C++, Scheme, Perl, Python.*
 - *Planned and implemented computing and network infrastructure for new undergraduate computing laboratory.*
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TowerJ Corporation

March 2001 through December 2001

Austin, TX

- *Managed the testing and benchmarking teams.*
- *Designed and prototyped management module for a Java Virtual Machine (JVM).*
- *Designed and implemented tools for automated testing, benchmarking and performance analysis of JVM.*

Skills: *Java, Java Compatibility Kit (JCK), JVM instrumentation, Java benchmarking, test automation.*

University of Texas at Austin

August 2000 through May 2001

Adjunct Assistant Professor of Computer Science

Austin, TX

- *Taught two semesters of Analysis of Algorithms to third year undergraduate students.*
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Enetica Solutions Inc.

January 2000 through February 2001

Director of Engineering / Chief Scientist

Austin, TX

- *Director of Engineering during development of the company's first product, including project and personnel management.*
- *Gave technical presentations and demonstrations to potential strategic partners, investors and the Board of Directors.*
- *Authored eight patent applications and three provisional patent applications.*
- *Architect for the company's first product, a development infrastructure for deploying robust distributed applications.*
- *Authored both external and internal technical documentation including: business plan, functional specification, architectural documents and user documentation.*
- *Designed basic architecture for company's second product, a distributed network management system.*

Skills: *Java, Perl, C, XML, CGI, Apache Webserver, socket programming, API development, technical management, project management.*

Microelectronics and Computer Technology Corporation (MCC)

September 1997 through January 2000

Member of Technical Staff

Austin, TX

- *Managed research and development projects, including customer relations management.*

- *Designed and implemented research prototypes.*
- *Ontological reasoning algorithms and data structures for agent brokering in peer-to-peer agent system.*
- *Intrusion detection system using peer-to-peer agent system.*
- *Complex event processing engine for DARPA (Rome AF Labs).*
- *Work-flow process awareness engine.*
- *Agent simulation system for doing comparative analysis of agent brokering algorithms.*

Skills: *Java, XML, agent architecture, API development, XML, technical project management.*

Education

Brown University Providence, R.I.
Ph.D. in Computer Science
"Exact and Approximate Algorithms for Partially Observable Markov Decision Processes."
May 1998

Brown University Providence, R.I.
M.Sc. in Computer Science
May 1994

State University of New York at Stony Brook Stony Brook, N.Y.
B.S. in Computer Science/Applied Mathematics and Statistics, Summa Cum Laude
May 1992

Suffolk County Community College Selden, N.Y.
A.S. in Computer Science
August 1990