

Randy Calistri-Yeh

EXECUTIVE SUMMARY

Over fifteen years experience designing and building **pragmatic intelligent systems** in academic, corporate research, and commercial settings. Over ten years experience leading multi-site software teams and subcontractors ranging from 2-25 scientists, engineers, and analysts. Proven track record of **transforming innovative research into commercial products**. Excellent abilities in innovation, design, management, strategic analysis, planning, and communication at all levels.

Interests include **search engines** (information retrieval, natural language, text analysis, multilingual / cross-lingual search), **data mining** (classification, clustering, knowledge extraction, statistical & probabilistic reasoning, text mining), and **heuristics** (personalization, user modeling, intelligent architectures & interfaces, plan recognition & planning).

EXPERIENCE

Waterfront Media / Everyday Health, Brooklyn NY

Senior Director of Search Technology

Sep 2009 – Present

Ask.com, Edison NJ

Senior Director of Context Mining & Content Management
Director of Context Mining

Jun 2008 – May 2009
Jun 2006 – Jun 2008

Responsibilities include search heuristics for billions of web pages and images, personalization for millions of users, content classification & quality analysis, vertical search optimization, revenue optimization, and tools for user productivity and back-end analysis. Directed up to 25 people on 3 continents. Mentored other managers, worked closely with other business units and partner companies. Many projects are proprietary/confidential. Live products from my teams can be seen on:

- www.ask.com (Zoom related search with path-based personalization, spell checker, web results with geo-biased personalization, triggering & content for specialized vertical search, major components of ranking)
- www.dictionary.com (Related search, crossword solver)
- www.rushmoredrive.com (customized search for black community)

TextWise / Manning & Napier Information Services, Rochester NY

Director of Science

Aug 2000 – May 2006

Reported directly to CEO/CTO. Responsible for all science/research decisions and overall science direction of the company. Provided technical management and leadership for a geographically distributed team of up to 11 scientists, linguists, and analysts. Involved in all aspects of project planning, strategy, proposal writing, and customer presentations. Major projects include:

- [Semantic SignaturesSM](#) contextual advertising delivers highly relevant ads to any webpage in real time (commercial product). Principal inventor of the underlying Trainable Semantic Vector technology. Articulated product vision and concrete path from raw technology to commercial product. Responsible for strategic research and planning of next-generation product. Responsible for all aspects of system

accuracy; results significantly outperformed all competitors and led directly to an 8-figure letter of intent from a potential acquirer.

- [CINDOR](#) cross-language search allows English searchers to retrieve relevant documents in Arabic (government product). Led science effort to design, prototype, and apply large-scale text data mining tools to automate construction of an English-Arabic computational semantic lexicon for query translation. The resulting lexicon was constructed automatically, with production and validation time >40x faster than alternate techniques. Close interaction with both academic and industrial subcontracts.
- [ContentTailor / ShrinkText](#) text customization provides adaptable text display for small-screen wireless devices (commercial prototype). Led science effort to invent new method for readable text compression summarization and to customize third-party text summarization.

Head of Advanced Technology

Jul 1998 – Aug 2000

Responsible for developing new technology to support the next generation of company products and services. Managed a distributed team of 4 scientists and made direct contributions to projects. Our core research result was a new method for domain-trainable semantic indexing of text, resulting in 5 issued patents.

Computer Scientist

May 1996 – Jul 1998

Principal architect and implementer of the processing system of MAPIT and PatentMiner, the first commercial natural-language data mining systems that search and analyze millions of patents in real time. Designed and implemented the indexing module, query processing module, visualization tools, and overall system architecture. Built working prototype with live data in 5 days; first paying customer in 6 months. Designed and implemented distributed hardware configuration for fault-tolerant real-time search (50% cheaper and 300% faster than original).

Odyssey Research Associates, Ithaca NY

Manager, Artificial Intelligence Group

Jan 1993 – Mar 1996

Project manager and principal investigator of a three-year government contract with Cornell University and the University of Iowa to build an intelligent planning architecture using techniques from planning, scheduling, machine learning, and distributed computing. Successfully delivered both innovative research breakthroughs and practical solutions to a specific customer problem in large-scale transportation scheduling.

Computer Scientist

May 1990 – Jan 1993

Created blackboard architecture design for a passive radar system. Implemented Bayesian belief network to diagnose radio faults.

EDUCATION

Ph.D. in Computer Science (artificial intelligence), Brown University, 1990.

Advisor: Eugene Charniak.

Dissertation: "Classifying and Detecting Plan-Based Misconceptions for Robust Plan Recognition"

M.S. in Computer Science, SUNY Albany, 1987.

B.S. summa cum laude in Computer Science and Mathematics, SUNY Albany, 1986.

Minors: German, Russian, Music, and Statistics.

ADDITIONAL INFORMATION

Member of AAAI, ACL, ACM, IEEE Computer Society, Phi Beta Kappa, Sigma Xi.

Classical [cellist](#), composer, and [arranger](#).

Author of numerous published papers and patents. Note that most work at both Ask.com and TextWise/MNIS is commercial/proprietary and therefore unpublished. More information available on [LinkedIn](#) and my [homepage](#).