

# Bill MacCartney

San Francisco, CA · 415-746-0904 · wcmac@cs.stanford.edu

---

## Overview

- Ph.D. candidate in Computer Science at Stanford University (graduation expected June 2009).
  - Research focus: statistical natural language processing (NLP) and computational semantics.
  - Strong background in artificial intelligence (AI), machine learning, and linguistics.
  - Extensive business experience: entrepreneurship, finance, technology development.
- 

## Professional Experience

2006: *Intern*, **GOOGLE RESEARCH**, Mountain View, California

- Pursued research on automated question answering.

2002-2003: *Researcher*, **KNOWLEDGE SYSTEMS LAB**, Stanford University, Stanford, California

- Developed and tested algorithms for distributed inferencing over large knowledge bases.

1999-2000: *Cofounder, VP Production*, **SAYIT, INC.**, San Francisco, California

- Secured \$5.3M in venture funding, with Softbank as lead investor.
- Designed and built website in only four months: browse & search, content-ranking, animation builder.
- Website ranked in top 250 within 3 months of launch, with over 2 million unique visitors per month.
- Managed web production team: project queuing and prioritizing, technical standards, project specs.
- Directly responsible for information architecture, content ontology, UI design, and usability analysis.

1996-1998: *Quant/Trader*, **D. E. SHAW & CO.**, New York, New York

- Held primary responsibility for trading a \$5B portfolio of Japanese bonds and interest-rate derivatives: JGB switches, swap spreads, basis swaps, TIBOR-LIBOR swaps, euroyen futures, municipal bonds, FX.
- Generated and analyzed trade ideas using quantitative modeling techniques: multi-factor yield curve models, no-arbitrage derivatives pricing models, and mean-reverting stochastic processes.
- Developed and maintained fixed-income analytics code in C, C++, Perl, awk, SQL, bash, Tcl.

1994-1995: *Researcher, Knowledge Engineer*, **CYCORP, INC.**, Austin, Texas

- Led effort to deploy Cyc AI technology in a multi-agent architecture to achieve distributed inferencing.
- Developed a C library implementing most Lisp functions to facilitate porting Cyc from Lisp to C.
- Designed and implemented a Mac OS GUI for Cyc (in C++) and a web interface to Cyc (using cgi).

1991-1994: *Head of Research & Development*, **TESTTAKERS, INC.**, Roslyn Heights, New York

- Held primary responsibility for research and curriculum development. Launched new LSAT course.
  - Developed and maintained a relational database application to run all aspects of the business.
- 

## Education

2003-2009: **STANFORD UNIVERSITY**, Stanford, California

- Ph.D. in Computer Science (expected June 2009). Focus: natural language processing (NLP).
- Published 12+ well-regarded NLP research papers. Won Best Paper Award at Coling-08.

1990-1991: **J. W. GOETHE UNIVERSITÄT**, Frankfurt, Germany

- Awarded Fulbright scholarship for graduate work in philosophy of language. Mastered German.

1986-1990: **PRINCETON UNIVERSITY**, Princeton, New Jersey

- B. A. in Philosophy, *summa cum laude*. Focus: philosophy of language, philosophy of mathematics.
  - GPA: 4.0 in major, 3.9 overall. GRE: 800/800/800. LSAT: 180.
- 

## Skills

- Java, C, C++, Python, Scala, Lisp, Perl, bash, SQL, MatLab, HTML, XML, ...
- Fluent in German, conversant in French, unintelligible in Spanish.
- Talented writer. Widely traveled. Massively parallel. Know where Elvis is.