

Professional Experience

Nuance Communications

SUNNYVALE, CA

Senior Research Scientist

Sept '12 – present

Helping to build a team of world-class researchers in natural language processing (NLP) and text understanding. Leading research on applying text analysis and logical, knowledge and machine learning methods to building prototypes of virtual assistants for the living room and elsewhere.

Deem, Inc (previously Rearden Commerce)

REDWOOD CITY, CA

Senior Research Scientist

Apr '11 – Sep '12

Sentiment analysis project, geared towards reviews in the travel domain, using logical knowledge representation and ontologies. Devised and coordinate annotation efforts from partners in India.

Stanford University and Santa Clara University

STANFORD, SANTA CLARA, CA

Lecturer in Logic

Jan '11 – Apr '11

Course on Basic Logic, both for undergraduates in Stanford (Philosophy majors) and for MSc students of Computer Science at Santa Clara University.

Cuil, Inc.

MENLO PARK, CA

Search Analyst

May '08 – Sept '10

Cuil was a very ambitious search start-up, which launched several important innovations: faceted search results with pictures, on demand wikipedia-like encyclopedia, timelines for all kinds of entities, personalized monitoring of twitter feeds, etc. Effectively coordinated team of ranking, data mining and front-end engineers to achieve quality testing tasks. User champion working across teams and boundaries to reach quality goals.

Xerox PARC

PALO ALTO, CA

Research Scientist

Oct '00 – May '08

Worked on Logics for Natural Language Semantics, Knowledge representation systems and evaluation of Semantic systems. Logics of context for AI projects NIMD (Novel Intelligence from Massive Data, DARPA), AQUAINT and IKRIS (Interoperable Knowledge Representation for Intelligence Support). Construction, deployment and results analysis of test suites used for evaluation and regression testing for ARDA Bridge and Asker systems, mapping NL to KR.

University of Birmingham

BIRMINGHAM, UK

Assistant Professor (US terminology)

Research on Linear Functional Programming, Linear Logic and Type Theory applications Teaching of undergraduates and graduate courses; PhD supervision.

The Computer Laboratory, University of Cambridge

CAMBRIDGE, UK

Research Associate

Various projects using formal tools on Verification of proof assistants; Lexical Semantics for natural language and Semantics of (functional) programming languages.

Please refer to my Google Scholar profile for a list of more than 70 publications and patents.

Education

University of Cambridge

CAMBRIDGE, UK

PhD, Pure Mathematics and Part III Mathematical Tripos

Thesis: The Dialectica Categories, supervisor: Prof M. J. E. Hyland

Pontifical Catholic University (PUC)

RIO DE JANEIRO, BRAZIL

MSc (Algebra) and BSc

Thesis: The Hurwitz-Radon Transformations, supervisor: Dr D. Randall

Skills

Technical expertise: Software design and implementation, within a team. Familiarity with ML, Java, Python and C, Perforce, SVN, CVS, Git, plus Mac OS, Linux and Windows.

Open Source projects: Portuguese OpenWordNet-PT, used by Google Translate as its Portuguese lexical resource, <http://wnpt.br1cloud.com/wn/> Also the Encyclopedia of Logical Proof Systems

Languages: Portuguese (*native speaker*), English (*full proficiency*), French (*elementary proficiency*) Spanish and Italian (*beginner*).
