

ANDREW HAZEN SCHLAIKJER

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Objective	Research position with emphasis on advanced information retrieval and recommendation applications.	
Education	Carnegie Mellon University , Pittsburgh, PA	GPA 3.83/4.0
	Ph.D. in Computer Science, August 2011 (anticipated)	
	Thesis Proposal: <i>Information Retrieval from Graphs of Typed Objects</i> , March 2010.	
	Thesis Committee: Profs. E. Nyberg, J. Carbonell, C. Faloutsos, C. L. Giles.	
	Columbia University , New York, NY	major GPA 3.45/4.0
	B.S. in Computer Science, May 2002	GPA 3.27/4.0
Specialties	Information Retrieval, Question Answering, Natural Language Processing, Machine Learning.	
Computer Skills	Programming – Java, C++, Perl, Bash, SQL, XML, CSS, JavaScript, ActionScript.	
	Frameworks – Distributed processing (Hadoop, Java RPC, JMS); Search Engines (Lucene, Indri, Terrier); Machine Learning (Weka, MinorThird, SVM-Light); Web (Servlets, JSP, JAX-RS, Flex, WordPress); Parsing (Antlr, Spirit); ORM and Serialization (JPA, JAXB, Protocol Buffers); IoC (Guice, Spring); AOP (AspectJ).	
	Applications – Document preparation (MS Office, \LaTeX); Databases (MySQL, HSQL, SQLite); Development (Eclipse, Emacs, Git, Subversion, CVS, Maven, Ant, Make).	
Research Experience	Research Co-op	January 2010 – August 2010
	<i>T. J. Watson Research Center, IBM, Hawthorne, NY</i>	
	<ul style="list-style-type: none">Designed and implemented Mapreduce-based large-scale parallel relation-learning system.Deployed and administrated Apache Hadoop cluster on 50+ IBM PowerPC blade servers.Contributed to development of IBM's <i>Watson</i> question-answering system (and Jeopardy! challenger).	
	Graduate Research Assistant	September 2004 – Present
	<i>Language Technologies Institute, Carnegie Mellon University, Pittsburgh, PA</i>	
	<ul style="list-style-type: none">Designed and built prototype risk assessment tools for the US Secret Service in collaboration with CERT.Investigated information retrieval techniques applicable to graphs of typed objects.Implemented object graph search algorithms and evaluation framework.Developed and evaluated novel strategies for relational question answering based on structured semantic representations of question and corpus text.Investigated semi-supervised machine learning techniques for coreference resolution.Improved modularity and extensibility of the JAVELIN question answering system.Participated in TREC question-answering and retrieval evaluations sponsored by NIST.	
	Research Assistant / Programmer	June 2002 – June 2004
	<i>Natural Language Processing Group, Columbia University, New York, NY</i>	
	<ul style="list-style-type: none">Designed and developed a distributed, modular question-answering system framework.Investigated definitional question-answering techniques.Investigated application of semantic role labeling technologies to question-answering tasks.	
	Undergraduate Research Assistant	December 2001 – June 2002
	<i>Biomedical Engineering Department, Columbia University, New York, NY</i>	
	<ul style="list-style-type: none">Investigated steady-state visually evoked potentials (SSVEP) as high bit-rate brain-computer interface.Applied hidden Markov tree models to the analysis of real-time brain signals.	
Teaching	Teaching Assistant	Fall 2007
	<i>Language Technologies Institute, Carnegie Mellon University, Pittsburgh, PA</i>	
	<ul style="list-style-type: none">Designed problem sets, exams, and lectured for graduate Software Engineering class of 45 students.	
	Private Tutor	2000 – 2002
	<i>Department of Computer Science, Columbia University, New York, NY</i>	
	<ul style="list-style-type: none">Tutored undergraduate and graduate students in Computer Science course material (data structures, algorithms, introductory programming).	
	Teaching Assistant	Summer 1997, 98, 99
	<i>Minuteman Regional High School, Lexington, MA</i>	
	<ul style="list-style-type: none">Taught children ages 10–15 intro programming in BASIC, Pascal, HTML, and C++.	

Publications Book Chapters

- S. Blair-Goldensohn, K. R. McKeown, A. H. Schlaikjer. *Answering Definitional Questions: A Hybrid Approach*, (Ch. 5) *New Directions In Question Answering*, Mark Maybury, ed. AAAI Press. 2004.

Refereed Conference Publications

- C. Welty, J. Fan, D. Gondek, A. Schlaikjer. *Large Scale Relation Detection*, NAACL-HLT FAM-LbR 2010.
- E. Nyberg., T. Mitamura, B. Frederking, V. Pedro, M. Bilotti, A. H. Schlaikjer, K. Hannan. *Extending the JAVELIN QA System with Domain Semantics*, AAAI 2005.
- L. V. Lita, A. H. Schlaikjer, W. Hong, E. Nyberg. *Qualitative Dimensions in Question Answering: Extending the Definitional QA Task*, (Poster) AAAI 2005.
- S. Blair-Goldensohn, K. R. McKeown, A. H. Schlaikjer. *DefScriber: A Hybrid System for Definitional QA*, (Demo) SIGIR 2003.

Unrefereed Conference Publications

- T. Mitamura, F. Lin, H. Shima, M. Wang, J. Ko, J. Betteridge, M. Bilotti, A. H. Schlaikjer and E. Nyberg. *JAVELIN III: Cross-Lingual Question Answering from Japanese and Chinese Documents*, NTCIR 2007.
- E. Nyberg, R. Frederking, T. Mitamura, M. Bilotti, K. Hannan, L. Hiyakumoto, J. Ko, F. Lin, L. Lita, V. Pedro, A. H. Schlaikjer. *JAVELIN I and II Systems at TREC 2005*, TREC 2005.
- S. Blair-Goldensohn, D. Evans, V. Hatzivassiloglou, K. McKeown, A. Nenkova, R. Passonneau, B. Schiffman, A. H. Schlaikjer, A. Siddharthan, S. Siegelman. *Columbia University at DUC 2004*, DUC 2004.
- S. Blair-Goldensohn, K. R. McKeown, A. H. Schlaikjer. *A Hybrid Approach for QA Track Definitional Questions*. TREC 2003.
- A. Nenkova, B. Schiffman, A. H. Schlaikjer, S. Blair-Goldensohn, R. Barzilay, S. Siegelman, V. Hatzivassiloglou, and K. McKeown. *Columbia at the Document Understanding Conference*, DUC 2003.
- S. S. Pradhan, G. Illouz, S. J. Blair-Goldensohn, A. H. Schlaikjer, V. Krugler, E. Filatova, P. A. Duboue, H. Yu, R. J. Passonneau, W. Ward, V. Hatzivassiloglou, D. Jurafsky, K. R. McKeown, J. H. Martin. *Building a Foundation System for Producing Short Answers to Factual Questions*, TREC-11 2002.

Technical Reports

- A. Schlaikjer. *A Dual-Use Speech CAPTCHA: Aiding Visually Impaired Web Users while Providing Transcriptions of Audio Streams*, CMU-LTI-07-014, Carnegie Mellon University. November, 2007.

Work Experience	Systems Monitor	Summer 2000, 01
	ACTV, New York, NY	
	<ul style="list-style-type: none"> • Monitored commercial web application performance and stability. • Analyzed real-time system network traffic (movie requests). • Developed scripts to automate service maintenance processes. 	
	Quality Assurance / Developer	Summer 2000
	Averstar, Burlington, MA	
	<ul style="list-style-type: none"> • Provided quality assurance support and developed unit tests for a Java debugging product tailored for analysis of distributed applications. 	
	Technical Support / Network Administrator	1999 – 2001
	New York State Banking Department, New York, NY	
	<ul style="list-style-type: none"> • Provided technical support for 80 department employees. • Administered network composed of MS Windows NT workstations, Cisco firewall and routing devices and IBM AS400 servers. • Investigated emerging technology solutions for adoption by the department. 	
Interests	Music performance (20 years' experience on viola, violin; just starting mandolin), hiking, cycling (Pittsburgh snow does not deter my bike commute), baking (ask me about my sangria pie), visual arts and design (I dabble with Processing and other viz tools).	

References available upon request