Susanne Z. Riehemann

sr@csli.stanford.edu

http://doors.stanford.edu/~sr/

Research Interests

Automated Deep Linguistic Analysis, Computational Grammar, Morphology, Corpus Linguistics, Machine Translation

Education

1993-2001 Ph.D., Stanford University, Department of Linguistics. Dissertation title: "A Constructional Approach to Idioms and Word Formation". Advisor: Prof. Thomas Wasow

1987-1993 M.A. (with distinction), University of Tübingen, Germany.
Major: Linguistics. Minors: Computer Science, Psychology.
Master's thesis title: "Word Formation in Lexical Type Hierarchies - A Case Study of *bar*-Adjectives in German". Advisors: Prof. Erhard Hinrichs and Prof. Marga Reis.

1990-1991 Exchange Student in One-Year Master's Program, University of Edinburgh, Centre for Cognitive Science.

Linguistic Society of America (LSA) Institute, Ohio State University (1993), European Summer Schools in Language, Logic, and Information: Leuven (1990), Saarbrücken (1991), Colchester (1992), Copenhagen (1994)

Professional Experience

2002-present Research Linguist at SRI International's AI Center
2005-present: TRANSTAC Project (Iraqi Arabic/English Speech-to-Speech Translation) - integrating, configuring and testing components, ensuring system quality, managing releases, supporting DARPA evaluations
2002-2005: CAST Project (Pashto/English Speech-to-Speech Translation) - worked on Pashto morphology and the English and Pashto lexicon, regression testing, evaluation metrics
2002-2003: Aquaint Project (From Question-Answering to Information Seeking Dialogs) - expanded Gemini lexical coverage, wrote linguistic axioms for the theorem prover SNARK

2002-present Webmaster for the Stanford Linguistics Department

2001-2003 Corpora manager for the Stanford Linguistics Department

1994-2001 Member of CSLI's Linguistic Grammars Online Project (LinGO)

1999-2000 Consultant for Broadbase Software, Inc.

1998 Consultant for Inxight, A Xerox New Enterprise Company

1995/1996 Teaching Assistant for Prof. Henriette de Swart (Introduction to Semantics and Pragmatics), Prof. Ivan A. Sag (HPSG), and Prof. Martin Kay (Computers and Language)

1991-1992 Research Assistant for Prof. Erhard W. Hinrichs, Department of Linguistics, University of Tübingen

1990 Summer Software Practicum, LILOG project, IBM Germany, Stuttgart

1987-1988 Research Assistant for Prof. Franz Guenthner, Seminar für natürlich-sprachliche Systeme, University of Tübingen

Skills

Languages: German (native), English (fluent), some Hebrew and French
Programming Languages: Perl, past experience with Prolog, Pascal
Operating Systems: Extensive experience with Unix (since 1990), Mac OS X and Windows XP
Other: HTML, CSS, XSL, XML, Photoshop, LaTeX

Publications

"Speech Translation for Low-Resource Languages: The Case of Pashto" (by A. Kathol, K. Precoda, D. Vergyri, W. Wang, S. Riehemann). 2005. In *Eurospeech 2005*.

"A Fine-Grained Evaluation Method for Speech-to-Speech Machine Translation Using Concept Annotations" (by R. Belvin, S. Riehemann, K. Precoda). 2004. In *LREC 2004*.

"Limited-Domain Speech-to-Speech Translation between English and Pashto" (by K. Precoda, C. Culy, H. Franco, A. Dost, M. Frandsen, J. Fry, A. Kathol, C. Richey, S. Riehemann, D. Vergyri, J. Zheng). 2004. *HLT/NAACL* Demo Sessions, May 2004.

"Deductive Question Answering from Multiple Resources" (by R. Waldinger, D. Appelt, J. Fry, D. Israel, P. Jarvis, D. Martin, S. Riehemann, M. Stickel, M. Tyson, J. Hobbs, J. Dungan). 2004. In *New Directions in Question Answering*, AAAI, 2004.

"The Limits of N-Gram Translation Evaluation Metrics" (by C. Culy, S. Riehemann). 2003. In *Proceedings of MT Summit IX*.

A Constructional Approach to Idioms and Word Formation. 2001. Stanford University Dissertation.

"Absolute Constructions: On the Distribution of Predicative Idioms" (by S. Riehemann, E. Bender). 1999. *WCCFL 18 Proceedings*, S. Bird, A. Carnie, J. Haugen, and P. Norquest (eds.), Cascadilla Press, Somerville: 476-489.

"Type-Based Derivational Morphology". 1998. *Journal of Comparative Germanic Linguistics* 2: 49–77.

"Translation Using Minimal Recursion Semantics" (by A. Copestake, D. Flickinger, R. Malouf, S. Riehemann, I. A. Sag). 1995. In *Proceedings of the Sixth International Conference on Theoretical and Methodological Issues in Machine Translation, Leuven*.

"Word Formation in Lexical Type Hierarchies - A Case Study of *bar*-Adjectives in German". 1993. SfS-Report-02-93. Seminar für Sprachwissenschaft, Eberhard-Karls-Universität Tübingen.

Presentations

International Macintosh Users Group (IMUG), Apple Campus, (11/2006), "The IraqComm Speech-to-Speech Translation System"
University of Washington CL MA students (2005)
Natural Language Lab, Simon Fraser University (5/2005)
Computational Linguistics Lab, University of Washington (4/2004)
University of California Berkeley Linguistics Students (2001)
HPSG conference, University of California, Berkeley (2000) (with E. Bender) "Experience-Based HPSG"
HPSG workshop, Cornell (1997) "Idiomatic Constructions in HPSG"
Department of Linguistics, University of Canterbury, Christchurch, New Zealand (1997)

Microsoft Research Institute, Macquarie University, Sydney, Australia (1997), "Verbmobil and the English Resource Grammar Project"

Center for Research in Language, University of San Diego (1997)

Sociable Syntax Supper Group, Stanford University (1996)

Berkeley/Stanford Construction Grammar Group meeting (1996)

Centre for Cognitive Science, University of Edinburgh (1996)

ACQUILEX Lexical Rules Workshop, Cambridge (1995) invited participant

HPSG workshop at the European Summer School in Language, Logic, and Information, Copenhagen (1994)

Department of Linguistics, University of Düsseldorf (1993)

Linguistics Colloquium, University of Tübingen (1993)

Institute for Knowledge Based Systems, IBM Germany, Stuttgart (1993)

HPSG workshop at the European Summer School in Language, Logic, and Information, University of Essex, Colchester (1992)

Academic Awards

Stanford University Fellowship, 1993-1994

LSA Fellowship for the 1993 Linguistic Institute at Ohio State University

Fellowship from 'Deutscher Akademischer Austauschdienst' for the Fourth European Summer School in Language, Logic, and Information at the University of Essex, Colchester, 1992.

November 2006