Curriculum Vitae

CHRISTOF MONZ

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Education

1999–2003	■ PhD in Computer Science at the Institute for Logic, Language and Computation (ILLC), University of Amsterdam. Dissertation thesis: *From Document Retrieval to Question Answering* (defended on December 11, 2003). Dissertation co-advisors: Prof. Franciska de Jong, Prof. Remko Scha, and Dr. Maarten de Rijke.
1995–1999	■ Degree in Computational Linguistics (summa cum laude) at the Institute for Natural Language Processing (IMS) in Stuttgart, Germany.
1997–1998	■ Exchange student at the Institute for Logic, Language and Computation (ILLC), University of Amsterdam.
1993–1995	■ Studies in Linguistics (major subject) and Psychology (minor subject) at the University of Wuppertal, Germany.

Employment

2005–present	■ Lecturer in the Department of Computer Science at Queen Mary, University of London.
2004–2005	■ Post-doctoral research fellow at the University of Maryland Institute for Advanced Computer Studies (UMIACS).
1999–2003	■ PhD student in the Derive project at ILLC, University of Amsterdam.
1997–1998	■ Student research assistant in the Computational Logic Group within the Spinoza project Logic in Action at the ILLC.
1996–1997	■ Student research assistant at the IMS in the SFB 340 project B3 for implementing a theorem prover on under-specified representations for natural language texts.

Research Experience

Machine Translation	Building a statistical machine translation system based on multi-stack decoding. 2004–present.
Summarization	Evaluating the correlation between different automatic evaluation measures and human judgments for several summarization approaches. 2004–present.
Question Answering	Building an open-domain question answering system (Tequesta) for English. Integration of advanced retrieval techniques and statistical linguistics techniques. 2000–present.
Information Retrieval	Building a flexible information retrieval system (FlexIR) to test several approaches to document retrieval. Retrieval for many European languages and cross-lingual retrieval. 1999–present.
Document Analysis	Using corpus-based linguistic strategies in combination with spatial reasoning and document recognition to determine reading order in scanned documents. 2000–2001.
Formal Semantics	Developing theorem provers that are especially designed for reasoning on under-specified representations of ambiguous natural language utterances. Supervised by Prof. Hans Kamp and Dr. Maarten de Rijke. 1997–2000.

Awards and Grants

2006-2008	■ Three-year grant from the Nuffield Organization under the Newly Appointed Lecturers in Science, Engineering and Mathematics scheme. Grant number: NAL/32720.
2006	■ Royal Society Conference grant for attending a conference in the US.
1999-2003	■ Four-year PhD research grant from the Physical Sciences Council with financial support from the Netherlands Organization for Scientific Research (NWO), project 612-12-001. (proposal co-authored with Maarten de Rijke)
2003	■ Travel grant to attend the 25th European Conference on Information Retrieval Research (ECIR-03).

Teaching Experience

2005–2007	■ Co-instructor for *Database Systems*, (together with Tony Stockman and Thomas Roelleke).
	■ Co-instructor for *Semantic Web*, (together with Graham White).
	■ Co-instructor for *Special Topics in Information Retrieval*, (together with Mounia Lalmas, Jane Reid, Thomas Roelleke, and Tassos Tombros).
2005–2006	■ Programming lab supervision for *Object-Oriented Programming*..
	■ Co-instructor for *Advanced Database Systems & Technology*, (together with Tony Stockman).
	■ Programming lab supervision for *Procedural Programming*.

2004–2005	▪ Co-instructor for *Introduction to Computational Linguistics*, (together with Bonnie Dorr).
2002–2003	▪ Co-instructor for *Introduction to Information Retrieval*, (together with Maarten de Rijke).
2001	▪ Co-instructor for *Introduction to Information Retrieval*, (together with Maarten de Rijke).
	▪ Co-instructor for *Introduction to Information Retrieval*, at ESSLLI 2001, (together with Maarten de Rijke).
2000	▪ Co-instructor for *Automated Reasoning for Linguists*, at ESSLLI 2000, (together with Geert-Jan Kruijff).
1999–2000	▪ Teaching assistant for *Reasoning and Implementation*.
	▪ Teaching assistant for *Automated Reasoning*.
	▪ Mentor for first-year students in Computer Science.
1998	▪ Teaching assistant for *Computational Semantics*.

Supervision

2005–2007	▪ Supervision of final year projects in Computer Science, QMUL.
	▪ Supervisor of Master's Students in Computer Science, QMUL.
2004–2005	▪ Primary supervisor of Necip Fazil Ayan, completed his PhD thesis on combining multiple alignment systems for improved word-based alignments. University of Maryland.
	▪ Primary supervisor of Nitin Madnani, working on Maximum Entropy models for NLP. University of Maryland.
	▪ Primary supervisor of Stacy President, completed her PhD thesis on automated evaluation for document summarization. University of Maryland.
2003	▪ Supervisor of Jeroen de Knijf. Graduation thesis: Document Length in Information Retrieval. University of Amsterdam.
2002	▪ Member of the graduation committee of Stefan Rijnhart. Graduation thesis: Employing WordNet for More Effective Information Retrieval. University of Amsterdam.
2001	▪ Co-supervisor of Alexander Bergo. Graduation thesis: Text Categorization and Prototypes. University of Amsterdam.

Summer Schools

2000	▪ ESSLLI, Birmingham, England.
1999	▪ ESSLLI, Utrecht, The Netherlands.
1996	▪ ESSLLI, Prague, Czech Republic.

Organizational Involvement

2007	■ Co-chair of the ACL 2007 workshop on Statistical Machine Translation (WMT07).
	■ Member of the program committee of SIGIR 2007.
	■ Member of the program committee of EMNLP 2007.
2006	■ Co-chair of the HLT-NAACL 2006 workshop on Statistical Machine Translation (WMT06).
	■ Member of the program committee of ACL-COLING 2006.
	■ Member of the program committee of HLT-NAACL 2006.
	■ Member of the program committee of ECIR 2006.
	■ Member of the program committee of AMTA 2006.
	■ Member of the program committee of EMNLP 2006.
	■ Member of the program committee of EACL 2006.
2005	■ Co-chair of the ACL 2005 workshop on Parallel Texts and Data-Driven Machine Translation.
	■ Member of the program committee of Applied Computing (AC 2005).
2004	■ Member of the program committee of RIAO 2004.
2003	■ Member of the program committee of the EACL Student Research Workshop.
2002	■ Information officer of the European Association for Logic, Language and Information (FoLLI), 1999–2002.
	■ Information officer of the ACL special interest group on Computational Semantics (SIGSEM), 1999–2002.
2001	■ Co-chair of the ACL/EACL Student Research Workshop, Toulouse, France.
1998	■ Member of the organization committee for Frontiers of Combining Systems (FroCoS '98) held at the ILLC/University of Amsterdam.
1996	■ Member of the organization committee for Tagung für Computerlinguistik-Studenten (TaCoS'96), held at the University of Stuttgart.

Memberships

2002–present	■ Association for Computing Machinery (ACM).
2002–present	■ ACM Special Interest Group on Information Retrieval (SIGIR).
1999–present	■ Association for Computational Linguistics (ACL)
1999–present	■ Association for Automated Reasoning (AAR).

Reviewing

Journals	■ Grammar
	■ IEEE Intelligent Systems
	■ Language and Computation

Books	■ *Labelled Deduction*, D. Basin, M. D'Agostino, D. Gabbay, S. Matthews, and L. Viganò (eds.), Kluwer Academic Publishers, 2000.
Proceedings	■ HLT-EMNLP 2005, ACL 2005 Workshop on Evaluation for MT and/or Summarization, ECIR 2005, ACL 2005, AC 2005, ACL 2004, EACL 2003 Student Workshop, ACL 2001, ESSLLI 2001 Student Session, EACL 1999 Student Workshop, WoLLiC 1999, ECAI 1998, and AiML 1998.

Software Development

2004–present	■ Implementation of statistical machine translation system integrating information retrieval techniques for context-sensitive translations. The system is implemented in Perl and will be evaluated at NIST's MTeval 2005.
1999–present	■ Implementation of a flexible information retrieval system (FlexIR). FlexIR is vector-space retrieval system and it allows one to experiment with a wide range of retrieval methods. FlexIR is mainly implemented in Perl. It was evaluated at CLEF 2001, CLEF 2002, and TREC 2002 (web track).
2000–2004	■ Development of an open-domain question answering system (Tequesta). Tequesta is mainly implemented in Perl and integrates off-the-shelf modules such as the TREETAGGER POS tagger and the MINIPAR dependency parser. Tequesta was evaluated at TREC 2001 and TREC 2002.
2002	■ Implementation of a web site search engine (Dowser) which is built around the FlexIR retrieval core. Dowser is implement in Perl.
2000–2001	■ Development of a document analysis system which assigns reading orders to scanned documents. This system was built together with Leon Todoran (logical labeling) and Marco Aiello (spatial reasoning). The natural language processing component uses an n-gram approach to determine reading orders.

Other Skills

Languages	Dutch (fluent), English (fluent), German (native), Italian (culinary)
Programming	Perl, C++, Java, Prolog, Python (in order of fluency)

Invited Talks

2007	■ Translation Disambiguation for Cross-Language Information Retrieval. Invited talk at ICCS/HCRC Seminar. University of Edinburgh, UK, March 16, 2007.
2006	■ Translation Disambiguation for Cross-Language Information Retrieval. Invited talk at the Natural Language Processing Group, Oxford University, UK, May 26, 2006.
2005	■ Iterative Translation Disambiguation for Cross-Language Information Retrieval. Invited talk at the IR Seminar, Queen Mary, University of London, UK, August 3, 2005.

	▪ Iterative Translation Disambiguation for Cross-Language Information Retrieval. Invited talk at the University of Amsterdam, the Netherlands, July 29, 2005.
2003	▪ From Document Retrieval to Question Answering. Invited talk at the Computational Linguistics Lab Colloquium, University of Maryland, USA, November 26, 2003.
	▪ Information Retrieval in the Context of Question Answering. Invited talk at the University of the Trento, Italy, October 21, 2003.
	▪ From Document Retrieval to Question Answering. Invited talk at the Computational Linguistics Colloquium, University of the Saarland, Saarbrücken, Germany, July 17, 2003.
2001	▪ Shallow Semantic Processing for Corpus-Based Question Answering. Invited talk given at the Institute for Natural Language Processing, Stuttgart, Germany May 10, 2001.
2000	▪ Computational Semantics in Information Retrieval. Invited talk given at the 2nd Workshop on Inference in Computational Semantics (ICoS-2), Schloss Dagstuhl, Germany, July 30, 2000.

Publications

Journal Articles

[1] Stacy President, Bonnie Dorr, Christof Monz, and Richard Schwartz. Task-based evaluation of text summarization using relevance prediction. *Information Processing and Management*, to appear.

[2] Vera Hollink, Jaap Kamps, Christof Monz, and Maarten de Rijke. Monolingual document retrieval for European languages. *Information Retrieval*, 7:33–52, 2004.

[3] Marco Aiello, Christof Monz, Leon Todoran, and Marcel Worring. Document understanding for a broad class of documents. *International Journal of Document Analysis and Recognition*, 5(1):1–16, 2002.

[4] Christof Monz and Maarten de Rijke. Inference in computational semantics. *Language and Computation*, 1(2):151–156, 2000.

Refereed Conference and Workshop Articles

[1] Christof Monz. Model tree learning for query term weighting in question answering. In G. Amati, C. Carpineto, and G. Romano, editors, *Proceedings of the 29th Conference on IR Research (ECIR 2007*, LNCS 4425, pages 589–596. Springer, 2007.

[2] Nizar Habash, Bonnie J. Dorr, and Christof Monz. Challenges in building an Arabic-English GHMT system with SMT components. In *Proceedings of the 7th Biennial Meeting of the Association for Machine Translation in the Americas (AMTA-06)*, pages 56–65, 2006.

[3] Necip Fazil Ayan, Bonnie J. Dorr, and Christof Monz. Alignment link projection using transformation-based learning. In *Proceedings of HLT-EMNLP 2005*, pages 185–192, 2005.

[4] Necip Fazil Ayan, Bonnie J. Dorr, and Christof Monz. Neuralign: Combining word alignments using neural networks. In *Proceedings of HLT-EMNLP 2005*, pages 65–72, 2005.

[5] David Chiang, Adam Lopez, Nitin Madnaniand Christof Monz, Philip Resnik, and Michael Subotin. The hiero machine translation system: Extensions, evaluation, and analysis. In *Proceedings of HLT-EMNLP 2005*, pages 779–786, 2005.

[6] Christof Monz and Bonnie Dorr. Iterative translation disambiguation for cross-language information retrieval. In *Proceedings of the 28th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, pages 520–527, 2005.

[7] Bonnie J. Dorr, Christof Monz, Stacy President, and Richard Schwartz. A methodology for extrinsic evaluation of text summarization: Does ROUGE correlate? In *Proceedings of the Association for Computational Linguistics Workshop on Intrinsic and Extrinsic Evaluation Measures for MT and/or Summarization*, pages 1–8, 2005.

[8] Christof Monz. Minimal span weighting retrieval for question answering. In Rob Gaizauska, Mark Greenwood, and Mark Hepple, editors, *Proceedings of the SIGIR Workshop on Information Retrieval for Question Answering*, pages 23–30, 2004.

[9] Jaap Kamps, Christof Monz, Maarten de Rijke, and Börkur Sigurbjörnsson. Language-dependent and language-independent approaches to cross-lingual text retrieval. In Carol Peters, Julio Gonzalo, Martin Braschler, and Michael Kluck, editors, *Comparative Evaluation of Multilingual Information Access Systems, CLEF 2003*, volume 3237 of *Lecture Notes in Computer Science*, pages 152–165. Springer, 2003.

[10] Jaap Kamps, Christof Monz, Maarten de Rijke, and Börkur Sigurbjörnsson. Approaches to robust and web retrieval. In *Proceedings TREC 2003*, pages 594–600, 2003.

[11] Christof Monz. Document retrieval in the context of question answering. In Fabrizio Sebastiani, editor, *Proceedings of the 25th European Conference on Information Retrieval Research (ECIR-03)*, Lecture Notes in Computer Science 2633, pages 571–579. Springer, 2003.

[12] Jaap Kamps, Christof Monz, Maarten de Rijke, and Börkur Sigurbjörnsson. Monolingual document retrieval: English versus other European languages. In Arjen P. de Vries, editor, *Proceedings DIR 2003*, pages 35–39, 2003.

[13] Jaap Kamps, Christof Monz, and Maarten de Rijke. Combining morphological and n-gram evidence for monolingual document retrieval. In *Proceedings of the Third Dutch Information Retrieval Workshop (DIR 2002)*, pages 47–51, 2002.

[14] Jaap Kamps, Maarten Marx, Christof Monz, and Maarten de Rijke. Exploiting structure for information retrieval. In *Proceedings of the Third Dutch Information Retrieval Workshop (DIR 2002)*, pages 19–26, 2002.

[15] Christof Monz and Maarten de Rijke. Light-weight subsumption checking for computational semantics. In Patrick Blackburn and Michael Kohlhase, editors, *Proceedings of the 3rd Workshop on Inference in Computational Semantics (ICoS-3)*, 2001.

[16] Christof Monz. Document fusion for comprehensive event description. In M. Maybury, editor, *Proceedings of the ACL 2001 Workshop on Human Language Technology and Knowledge Management*, 2001.

[17] Christof Monz and Maarten de Rijke. Deductions with meaning. In Michael Moortgat, editor, *Logical Aspects in Computational Linguistic*, LNAI 2014, pages 1–10. Springer Verlag, 2001.

[18] Leon Todoran, Marco Aiello, Christof Monz, and Marcel Worring. Logical structure detection for heterogeneous document classes. In *Proceedings of Document Recognition and Retrieval VIII*, pages 99–110. SPIE, 2001.

[19] Marco Aiello, Christof Monz, and Leon Todoran. Combining linguistic and spatial information for document analysis. In Joseph Mariani and Donna Harman, editors, *Proceedings of RIAO'2000 Content-Based Multimedia Information Access*, pages 266–275, 2000.

[20] Christof Monz. Computing presuppositions by contextual reasoning. In Patrick Brézillon, Roy Turner, Jean-Charles Pomerol, and Elise Turner, editors, *Proceedings of the AAAI-99 Workshop on Reasoning in Context for AI Applications*, 1999.

[21] Christof Monz. Contextual inference in computational semantics. In Paolo Bouquet, Patrick Brézillon, Luciano Serafini, Massimo Benerecetti, and Francesca Castellani, editors, *2nd International and Interdisciplinary Conference on Modeling and Using Context (CONTEXT'99)*, LNAI 1688, pages 242–255. Springer, 1999.

[22] Christof Monz. Modeling ambiguity in a multi-agent system. In Paul Dekker, editor, *Proceedings of the 12th Amsterdam Colloquium (AC'99)*, pages 43–48. Institute for Logic, Language and Computation, University of Amsterdam, 1999.

[23] Christof Monz and Maarten de Rijke. A tableau calculus for pronoun resolution. In Neil Murray, editor, *Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX'99)*, LNAI 1617, pages 247–262. Springer, 1999.

[24] Christof Monz. Dynamic semantics and underspecification. In Henri Prade, editor, *Proceedings of the 13th European Conference on Artificial Intelligence (ECAI'98)*, pages 201–202. John Wiley & Sons, 1998.

[25] Christof Monz. Dynamic semantics and ambiguity. In Ivana Kruijff-Korbayová, editor, *Proceedings of the 3rd ESSLLI Student Session (ESSLLI'98)*, pages 212–222, 1998.

[26] Christof Monz and Maarten de Rijke. Inference and natural language semantics. In *Proceedings of Logical Aspects in Computational Linguistics (LACL'98)*, 1998.

[27] Christof Monz and Maarten de Rijke. Labeled resolution for discourse semantics. In *Proceedings of the 1st International Workshop on Labelled Deduction (LD'98)*. Dept. of Computer Science, University of Freiburg, 1998.

[28] Christof Monz and Maarten de Rijke. A resolution calculus for dynamic semantics. In Jürgen Dix, Luis Fariñas del Cerro, and Ulrich Furbach, editors, *Logics in Artificial Intelligence (JELIA'98)*, LNAI 1489, pages 184–198. Springer, 1998.

[29] Christof Monz and Maarten de Rijke. A tableaux calculus for ambiguous quantification. In Harrie de Swart, editor, *Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX'98)*, LNAI 1397, pages 232–246. Springer, 1998.

Un-Refereed Publications

[1] Chris Callison-Burch, Cameron Fordyce, Philipp Koehn, Christof Monz, and Josh Schroeder. (meta-) evaluation of machine translation. In *Proceedings of the Second Workshop on Statistical Machine Translation*, pages 136–158. Association for Computational Linguistics, 2007.

[2] Christof Monz. Statistical machine translation and cross-language IR: QMUL at CLEF 2006. In *Working Notes for the CLEF 2006 Cross Language Evaluation Campaign*, 2006.

[3] Philipp Koehn and Christof Monz. Manual and automatic evaluation of machine translation between european languages. In *Proceedings on the HTL-NAACL Workshop on Statistical Machine Translation*, pages 102–121. Association for Computational Linguistics, 2006.

[4] David Zajic, Bonnie Dorr, Richard Schwartz, Christof Monz, and Jimmy Lin. A sentence-trimming approach to multi-document summarization. In *Proceedings of the HLT-EMNLP 2005 Workshop on Text Summarization*, 2005.

[5] Philipp Koehn and Christof Monz. Shared task: Statistical machine translation between European languages. In *Proceedings of the Association for Computational Linguistics Workshop on Building and Using Parallel Texts*, pages 119–124, 2005.

[6] Valentin Jijkoun, Gilad Mishne, Christof Monz, Maarten de Rijke, Stefan Schlobach, and Oren Tsur. The University of Amsterdam at the TREC 2003 Question Answering Track. In *Proceedings TREC 2003*, pages 586–593, 2003.

[7] Christof Monz. *From Document Retrieval to Question Answering*. PhD thesis, University of Amsterdam, 2003.

[8] Christof Monz, Jaap Kamps, and Maarten de Rijke. The University of Amsterdam at TREC 2002. In Ellen M. Voorhees and Lori Buckland, editors, *The Eleventh Text REtrieval Conference (TREC 2002)*, pages 603–614. NIST Special Publication 500-251, 2002.

[9] Christof Monz, Jaap Kamps, and Maarten de Rijke. The University of Amsterdam at CLEF 2002. In *Working Notes for the CLEF 2002 Workshop*, pages 73–84, 2002.

[10] Christof Monz and Maarten de Rijke. Shallow morphological analysis in monolingual information retrieval for Dutch, German and Italian. In Carol Peters, Martin Braschler, and Julio Gonzalo Michael Kluck, editors, *Proceedings of the 2nd Workshop of the Cross-Language Evaluation Forum (CLEF 2001*, LNCS 2406, pages 262–277. Springer Verlag, 2002.

[11] Christof Monz and Maarten de Rijke. Tequesta: The University of Amsterdam's textual question answering system. In *Proceedings of Tenth Text Retrieval Conference (TREC-10)*, pages 513–522, 2001.

[12] Christof Monz and Maarten de Rijke. The University of Amsterdam at CLEF 2001. In *Proceedings of the Cross Language Evaluation Forum Workshop (CLEF 2001)*, pages 165–169, 2001.

[13] Carlos Areces, Christof Monz, Hans de Nivelle, and Maarten de Rijke. The guarded fragment: Ins and outs. In *JFAK. Essays Dedicated to Johan van Benthem on the Occasion of his 50th Birthday*. Vossiuspers, Amsterdam University Press, 1999.

Edited Volumes

[1] Chris Callison-Burch, Philipp Koehn, Cameron Shaw Fordyce, and Christof Monz, editors. *Proceedings of the second ACL Workshop on Statistical Machine Translation (WMT07)*, 2007.

[2] Philipp Koehn and Christof Monz, editors. *Proceedings of the HLT-NAACL Workshop on Statistical Machine Translation (WMT06)*, 2006.

[3] Philipp Koehn, Joel Martin, Rada Mihalcea, Christof Monz, and Ted Pedersen, editors. *Proceedings of the ACL Workshop on Building and Using Parallel Texts*, 2005.

[4] Eleni Miltsakai, Christof Monz, and Antonio Ribeiro, editors. *Proceedings of the Student Research Workshop—Companion Volume to the Proceedings of the 39th Annual Meeting of the Association for Computational Linguistics (ACL)*. Morgan Kaufmann, 2001.

[5] Christof Monz and Maarten de Rijke, editors. *Language and Computation: Special Issue on Inference in Computational Semantic*, volume 1(2). Hermes Science, 2000.

[6] Christof Monz and Maarten de Rijke, editors. *Proceedings of the First Workshop on Inference in Computational Semantics (ICoS-1)*. Institute for Logic, Language and Computation, Amsterdam, 1999.

Book Reviews

[1] Christof Monz. Review of Alexander Franz: Automatic ambiguity resolution in natural language processing: An empirical approach. *Journal of Logic, Language and Information*, 8(1):111–114, 1999.