Amitabh Singhal

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Research Interests

Information retrieval, networked information retrieval, automatic text summarization, text structuring

Education

1992 - present	**Cornell University** Ph.D., Computer Science (expected May, 1996) Thesis title: Term Weighting Revisited Thesis advisor: (late) Professor Gerard Salton Current thesis supervisors: Dr. Chris Buckley and Professor Claire Cardie	Ithaca, NY
1990 - 1992	**University of Minnesota** M.S., Computer Science Thesis Title: Relevance Feedback as a Tool in Information Retrieval Thesis advisor: Professor Donald Crouch	Duluth, MN
1985 - 1989	**University of Roorkee** B.E., Computer Science	Roorkee, India

Teaching Experience

Spring 1996	**Cornell University** Introduction to Databases and Information Retrieval (CS-432) A senior level course in database systems and information retrieval. Practicum in Database Systems (CS-433) Programming course associated with CS-432.	Ithaca, NY
Fall 1993-Spr. 1995 (4 semesters)	**Cornell University** Introduction to Unix and C (CS-214) A six-week introductory course in Unix and C.	Ithaca, NY
Fall 1995-Spr. 1996 (2 semesters)	**Cornell University** Seminar in Text Processing and Information Retrieval (CS-739) A research seminar for reviewing current research and exploring new ideas in information retrieval.	Ithaca, NY
Tutorial (May 1995)	**IEEE Dual-Use Technologies and Applications Conference** Title: Automatic Information Retrieval	Utica, NY
Spr. 1993, Spr. 1994 (2 semesters)	**Cornell University** Teaching Assistant, Introduction to Database Systems (CS-432)	Ithaca, NY
Fall 1990-Fall 1991 (4 quarters)	**University of Minnesota** Teaching Assistant, Department of Computer Science	Duluth, MN

Professional Experience

1992 - present	**Cornell University** Research Assistant to Professor Gerard Salton The Smart group, Department of Computer Science	Ithaca, NY
Mar/1992 - Aug/1992	**West Publishing Company** Programmer, Information Retrieval research group	Eagan, MN
1989 - 1990	**Tata Consultancy Services** Programmer, Advanced Databases group	New Delhi, India

Publications

Journal Articles

Document Length Normalization
Amit Singhal, Gerard Salton, Mandar Mitra, and Chris Buckley
Information Processing and Management (to appear).
Also, Technical Report, TR 95-1529, Department of Computer Science, Cornell University.

Automatic Text Decomposition and Structuring
Gerard Salton, James Allan, and Amit Singhal
Information Processing and Management (to appear).

Automatic Analysis, Theme Generation, and Summarization of Machine Readable Texts
Gerard Salton, James Allan, Chris Buckley, and Amit Singhal
Science **264** (3 June 1994), 1421-1426.

Refereed and Invited Conference Publications

Pivoted Document Length Normalization
Amit Singhal, Chris Buckley, Mandar Mitra, (Gerard Salton)
ACM SIGIR 1996 (submitted).
Also, Technical Report, TR 95-1560, Department of Computer Science, Cornell University.

Length Normalization in Degraded Text Collections
Amit Singhal, Gerard Salton, and Chris Buckley
Fifth Annual Symposium on Document Analysis and Information Retrieval (to appear).
Also, Technical Report, TR 95-1507, Department of Computer Science, Cornell University.

Automatic Text Decomposition Using Text Segments and Text Themes
Gerard Salton, Amit Singhal, Chris Buckley, and Mandar Mitra
Hypertext 1996 (to appear).
Also, Technical Report, TR 95-1555, Department of Computer Science, Cornell University.

New Retrieval Approaches Using SMART: TREC 4
Chris Buckley, Amit Singhal, Mandar Mitra, (Gerard Salton)
Proceedings of the Fourth Text REtrieval Conference (TREC-4) (to appear).

Automatic Query Expansion Using SMART: TREC 3
Chris Buckley, Gerard Salton, James Allan, and Amit Singhal
Proceedings of the Third Text REtrieval Conference (TREC-3), NIST Special Publication 500-225, 69-80.

Technical Reports and Other Publications

Automatic Text Browsing using Vector Space Model
Amit Singhal and Gerard Salton
IEEE Dual-Use Technologies and Applications Conference Proceedings, May 1995, 318-324.

Selective Text Traversal
Gerard Salton and Amit Singhal
Technical Report, TR 95-1549, Department of Computer Science, Cornell University.

Automatic Text Theme Generation and the Analysis of Text Structure
Gerard Salton and Amit Singhal
Technical Report, TR 94-1438, Department of Computer Science, Cornell University.

Professional Affiliations

Member, Association for Computing Machinery
Member, ACM Special Interest Group in Information Retrieval (SIGIR)

Services

Conference Referee, ACM SIGIR 1994 and 1995

Citizenship

India. Currently on F-1 visa in the United States.

January 25, 1996

References

1. Dr. Chris Buckley
   Research Associate
   Department of Computer Science
   Cornell University
   18 Dickinson Ct.
   Plainsboro, NJ 08536
   609/275-4691
   chrisb@cs.cornell.edu

2. Professor Donald Crouch
   Head, Department of Computer Science
   320 Heller Hall
   University of Minnesota, Duluth
   10 University Drive
   Duluth, MN 55812
   218/726-7607
   dcrouch@d.umn.edu

3. Professor Claire Cardie
   Department of Computer Science
   4130 Upson Hall, Cornell University
   Ithaca, NY 14853-7501
   607/255-9206
   cardie@cs.cornell.edu

4. Professor Robert Constable
   Chair, Department of Computer Science
   4130 Upson Hall, Cornell University
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Note: Please contact the references directly to obtain their letters of recommendation.

Additional references available upon request.