

ANJA REMSHAGEN

Computer Science Department
University of West Georgia
Carrollton, GA 30118

Phone: (678) 839-6657
E-mail: anja@westga.edu
Web: <http://www.westga.edu/~anja>

EDUCATION

- 1999 - 2001 Ph.D. in Computer Science
University of Texas at Dallas
Dissertation: "Learning Algorithms for Logic Problems at the First and Second Levels of the Polynomial Hierarchy"
Advisor: Klaus Truemper
- 1994 -1998 M.S. in Mathematics
Minor in Computer Science
University of Cologne, Germany
Thesis: "Das Max-Cut-Problem in Graphen mit konstantem Geschlecht und beschränkten Kantengewichten" (The max-cut problem in graphs with constant genus and bounded edge weights)
Advisor: Michael Jünger
Honors: passed "with Distinction"
- 1991 -1994 Certificate as Mathematical-Technical Assistant
Bayer, Leverkusen, Germany

EMPLOYMENT HISTORY

- 2007 -- present Associate Professor
University of West Georgia
Computer Science Department
- 2001 – 2007 Assistant Professor
University of West Georgia
Computer Science Department
- 1999 -- 2001 Research Assistant
University of Texas at Dallas
Computer Science Department
- 1996 -- 1998 Teaching Assistant
University of Cologne, Germany
Computer Science Department
- 1991 -- 1996 Mathematical-Technical Assistant
(industrial programmer)
Bayer, Leverkusen, Germany

RESEARCH INTERESTS

- Quantified Boolean formula
- Automated reasoning, theorem proving
- Intelligent systems
- Computer science education

JOURNAL PUBLICATIONS

- H. Kleine Büning and A. Remshagen. An upper bound for the circuit complexity of existentially quantified Boolean formulas. *Theoretical Computer Science*, accepted April 2010
- A. Remshagen and K. Truemper. *An Effective QBF Solver for the Futile Questioning Problem*. *Journal of Automated Reasoning* 34(1), 31–47, 2005
- A. Remshagen and K. Truemper. *Learning in a Compiler for MINSAT Algorithms*. *Theory and Practice of Logic Programming* 3(3), 271–286, 2003

CONFERENCE PUBLICATIONS

- A. Remshagen. *Making Discrete Mathematics Relevant*. The 48th ACM Southeast Conference, 2010
- A. Remshagen and K. Truemper. *An Alternative Representation for QBF*. Proceedings of the 2009 International Conference on Artificial Intelligence (ICAI 2009), 531–535, July 2009
- J. Allen, A. Remshagen, and L. Yang. *Can Virtual Worlds bring a 'Second Life' to CS Education?* Birds-of-a-Feather Session at the Richard Tapia Celebration of Diversity in Computing, 19–20, 2009
- A. Remshagen and K. Truemper. *The Complexity of Futile Questioning*. Proceedings of the International Conference on Foundations in Computer Science, 132–138, 2007
- K. Moreland, A. Remshagen, and K. Riehl. *An Intelligent System for Medical Diagnosis*. Grace Hopper Celebration of Women in Computing, 2006
- B. Browning and A. Remshagen. *A SAT-Based Solver for Q-ALL SAT*. Proceedings of the 44th Annual ACM Southeast Conference, 30–33, 2006
- A. Remshagen, L. Yang and S. Miller. *Widening the Pipeline for All Minority Students*. Birds-of-a-Feather Session at the Richard Tapia Celebration of Diversity in Computing, 25–26, 2005
- N. Hristov and A. Remshagen. *Local Search for Quantified Boolean Formulas*. Proceedings of the 43rd Annual ACM Southeast Conference 1, 116–120, 2005
- C. Otwell, A. Remshagen, and K. Truemper. *An Effective QBF Solver for Planning Problem*. Proceedings of The 2004 International Conference on Artificial Intelligence, 311–316, 2004
- V. Kaibel and A. Remshagen. *On the Graph-Density of Random 0/1-Polytopes*. (Proc. RANDOM03), Aurora, Jansen, Roli, and Sahai (eds.), LNCS 2764, Springer, 318–328, 2003
- A. Remshagen and K. Truemper. *Algorithms for Logic-Based Abduction*. SAT 2002, Quantified Boolean Formulas Mini Workshop, 2002

TECHNICAL REPORTS

- A. Remshagen. *On the Complexity of the CQF Hierarchy*. 2007
- A. Remshagen and K. Truemper. *A Solver for the Quantified Formula Problem Q-ALL SAT*. 2005
- G. Felici, A. Remshagen, and K. Truemper. *The Futile Questioning Problem*. IASI Research Report n. 591, Italy, Rome, Luglio 2003

PROFESSIONAL ACTIVITIES

May 2009	Visiting Professor, University of Paderborn, Germany Collaboration with Hans Kleine Büning
March 2008	“Constrained Quantified Formulas,” presentation at the Department of Defense SAT Workshop, Baltimore, Maryland
January 2007	“Algorithm for Q-ALL SAT with Learning via Heuristics,” presentation at the 11th Combinatorial Workshop, Aussois, France
October 2006	“An Intelligent System for Medical Diagnosis,” presentation at the Grace Hopper Celebration of Women in Computing, San Diego, California
September 2004	“Fingerprint Matching,” presentation at the Department of Mathematics of the University of West Georgia
December 2004	Workshop with Klaus Truemper at the University of West Georgia
June 2003	Workshop with Klaus Truemper at the University of Texas at Dallas
March 2002	Attended The 35th ACM Technical Symposium on Computer Science Education, SIGCSE 2004, Norfolk, Virginia
March 2003	Invited to the Seventh Combinatorial Optimization Workshop, Aussois, France
July 2002	Workshop with Volker Kaibel at the Technische Universität Berlin, Germany
June 2002	Workshop with Giovanni Felici at the IASI-CNR, Rome, Italy
March 2002	Attended The 33rd ACM Technical Symposium on Computer Science Education, SIGCSE 2002, Cincinnati, Kentucky

INTERNAL GRANTS

- “Constrained Quantified Formulas” Learning Resources Committee Faculty Research Grant (\$750), 2090/2010
- “Virtual Worlds” Retention, Progression, and Graduation Initiative (\$1400) (collaboration with L. Yang), Spring 2008
- “Tackling a New Complexity Level in Artificial Intelligence” Sponsored Operations Faculty Research Enhancement Award (\$2400), 2004/2005
- “Narrowing the Gender Gap in CS” (collaboration with L. Yang), Learning Resources Committee Faculty Research Grant (\$1500), 2004/2005

PROFESSIONAL MEMBERSHIPS

- Member of the Association for Automated Reasoning
- Member of the Association for Logic Programming
- Member of the Upsilon Pi Epsilon (Computer Science Honor Society)
- Member of the Computer Science Teacher Association

COURSES TAUGHT

CS 1020	Computers and Society
CS 1030	Introduction to Computers Concepts

CS 1300 Introduction to Computer Science
 CS 1301 Computer Science I
 CS 3100 Computer Organization and Architecture
 CS 3110 System Architecture
 CS 3151 Data Structures and Discrete Mathematics I
 CS 3152 Data Structures and Discrete Mathematics II
 CS 3270 Intelligent Systems
 CS 4290 Theory of Computation
 CS 4985 Image Processing
 CS 6985 Image Processing

COURSE/CURRICULUM-RELATED ACTIVITIES

- Usage of the course development software WebCT or Moodle in all courses
- Revision of the courses CS3151/3152, CS3270, and CS4290
- Curriculum development and assessment for the CAC/ABET Accreditation
- Curriculum development for the Master of Science in Applied Computer Science program

COMMITTEE MEMBERSHIPS

2009/2010 Member of the Arts and Science Dean's Task Force on Female Leadership
 Member of the CS Job Search Committee
 Chair of the CS Undergraduate Curriculum Committee
 Library Representative of the CS Department
 CS Review Committee for the Online Course Development Special Initiative

2008/2009 Member of the Arts and Science Tenure and Promotion Committee
 Chair of the CS Undergraduate Curriculum Committee
 Library Representative of the CS Department
 CS Review Committee for the Online Course Development Special Initiative

2007/2008 Member of the Arts and Science Tenure and Promotion Committee
 Member of the Arts and Science Learning Resource Committee
 Member of the CS Undergraduate Curriculum Committee
 Member of the CS Service Course Committee
 Library Representative of the CS Department

2006/2007 Member of the Arts and Science Learning Resource Committee
 Member of the CS Undergraduate Curriculum Committee
 Member of the CS Service Course Committee
 Library Representative of the CS Department

2005/2006 Member of the Arts and Science Learning Resource Committee
 Member of the CS Undergraduate Curriculum Committee
 Member of the CS Service Course Committee
 Library Representative of the CS Department

2005/2006 Member of the CS Undergraduate Curriculum Committee
 Member of the CS Graduate Curriculum Committee
 Library Representative of the CS Department

- 2004/2005 Member of the Arts and Science Faculty Advisory Committee
Member of the CS Undergraduate Curriculum Committee
Member of the CS Graduate Curriculum Committee
Library Representative of the CS Department
- 2003/2004 Member of the Arts and Science Faculty Advisory Committee
Chair of the CS Graduate Curriculum Committee
Member of the CS Undergraduate Curriculum Committee
Member of the CS Search and Selection Committee of
Library Representative of the CS Department
- 2002/2003 Member of the CS Undergraduate Curriculum Committee
Member of the CS Graduate Curriculum Committee
- 2001/2002 Member of the CS Undergraduate Curriculum Committee
Member of the CS Graduate Curriculum Committee

SERVICE TO THE INSTITUTION

- 2007 to present Advisor of CSWoW (Computer Science Women of West Georgia, a student organization and initiative to increase the number of female computer science students)
- 2003 to 2007 Advisor of UPE (student organization and honor society in computer science)
- 2003/2004 Student Advisor at the EXCEL Center
- 2003/2004 Mentoring of a new colleague (Jiageng Li)
- 2002/2003 Mentoring of a new colleague (Li Yang)
- Fall 2003 and Fall 2002 Coach of the UWG programming teams for the Southeastern ACM Programming Contest

HONORS

- Outstanding Undergraduate Teacher of the Year 2007 – 2008 awarded by vote of the Computer Science undergraduate students at the University of West Georgia
- 2003 Upsilon Pi Epsilon Computer Science Honor Society Inductee

