

Curriculum Vitae

James L. Caldwell

Department of Computer Science
University of Wyoming
Dept 3315
1000 E. University Ave.
Laramie, WY 82071

Office: +1(307)766-4913
Fax: +1(307)766-4036
email: jlc@cs.uwyo.edu
www: <http://www.cs.uwyo.edu/~jlc/>

Education

Ph.D. 1998 Cornell University
M.S. 1988 State University of New York at Albany
B.S. 1984 State University of New York at Albany

Professional Positions

Academic Appointments

2008 Professor (visiting), School of Computer Science, University of St Andrews, UK
2004– Associate Professor, Department of Computer Science, University of Wyoming.
1998–2004 Assistant Professor, Department of Computer Science, University of Wyoming.
1997–1998 Research Assistant, Department of Computer Science, Cornell University

Professional Employment

1988–1997 Computer Scientist, NASA Langley Research Center, Hampton, VA.
1985–1988 Software Engineer, General Electric Corporate Research and Development,
Schenectady, N.Y.
1983–1985 Software Engineer, Phoenix Data Systems, Albany, N.Y.
1980–1981 Systems Programmer, CMT Trade Center, N.Y., N.Y.

Honors and Awards

2000-2004 National Science Foundation - NSF Career Award.
1990-1993 NASA Graduate Studies Fellowship.

Publications

Submitted for Publication

Nadya Kusmina, John Paul, Ruben Gamboa and James Caldwell, (full paper) State Space Discovery by Guided Dynamic Analysis, submitted to: ISSTA 2008, ACM International Symposium on Software Testing and Analysis Seattle, WA, July 20-24 2008

To Appear

Nadya Kusmina, John Paul, Ruben Gamboa and James Caldwell, Towards a Formal Evaluation of Refactorings (Abstract, 3 pp.), Accepted to: The Sixth NASA Langley Formal Methods Workshop LFM 2008, April 30 - May 2, 2008

Journal Articles

James Caldwell and Josef Pohl, Constructive membership predicates as index types, *Electronic Notes in Theoretical Computer Science*, Vol. 174, No. 7, pp. 3–16, June 2007.

James L. Caldwell, Ian Gent and Judith Underwood: Search Algorithms in Type Theory. *Theoretical Computer Science*, vol. 232, no. 1–2, pp. 55–90, February 2000.

James L. Caldwell: Formal Methods Technology-Transfer: a View from NASA. *Formal Methods in System Design*. vol. 12, no. 2, pp. 125–137, March 1998.

Book Chapters

Ben L. Di Vito, Ricky W. Butler, and James L. Caldwell: High level design proof of a reliable computing platform. In *Dependable Computing for Critical Applications 2, Dependable Computing and Fault-Tolerant Systems*, pages 279–306. Springer Verlag, 1992.

Refereed Conference Articles

Tjark Weber and James Caldwell: Constructively Characterizing Fold and Unfold. in *Logic Based Program Synthesis and Transformation*. Lecture Notes in Computer Science, Vol. 3018 Edited by M. Bruynooghe, Springer Verlag, 2004.

James L. Caldwell and John Cowles: Representing Nuprl Proof Objects in ACL2: toward a proof checker for Nuprl, in *Proceedings of the Third International Workshop on the ACL2 Theorem Prover and Its Applications (ACL2-2002)*, 8–9 April 2002, Grenoble France.

James L. Caldwell: Extracting Recursion Operators in Nuprl’s Type Theory. In A. Pettorossi, editor, *Proceedings of LOPSTR 2001, the Eleventh International Workshop on Logic-based Program Synthesis and Transformation*, pp.124–131, Paphos, Cyprus, November 28–30, 2001. Lecture Notes in Computer Science, vol. 2372, Springer 2002.

Stuart Allen, James L. Caldwell, and Robert Constable: Logical Aspects of Digital Mathematics Libraries. In O. Caprotti and B. Buchberger, editors, *Proceedings of the First Workshop on Mathematical Knowledge Management*, RISC, A-4232 Schloss Hagenberg, Austria, 24–26, 2001.

Jeffrey Van Baalen, James L. Caldwell, Shivakant Mishra: Specifying and Checking Fault-tolerant Agent-based Protocols using Maude. In J.L. Rash, C.A. Rouff, W. Truszkowski, D. Gordon and M.G. Hinchey, editors, *Formal Approaches to Agent-Based Systems*, Lecture Notes in Artificial Intelligence, vol. 1871, pp. 180–193, Springer, 2001.

James L. Caldwell: Intuitionistic Tableau Extracted. In Neil V. Murray, editor, *Automated Reasoning with Analytic Tableaux and Related Methods*, Lecture Notes in Artificial Intelligence, vol. 1617, pp. 82–96, 1999, Springer.

James L. Caldwell: Classical Propositional Decidability via Nuprl Proof Extraction. In Jim Grundy and Malcolm Newey, editors, *TPHOLs’98: The 11th International Conference on Theorem Proving in Higher Order Logics*, Lecture Notes in Computer Science vol. 1479, pp. 105–122, 1998, Springer.

James L. Caldwell: Moving Proofs-as-Programs into Practice. In *Proceedings, ASE ’97, 12th IEEE International Conference Automated Software Engineering*, pp. 10–17, 1997, IEEE Computer Society Press.

James L. Caldwell and Judith Underwood: Classical tools for constructive proof search. In Didier Galmiche, editor, *Proceedings of the CADE-13 Workshop on Proof search in type-theoretic languages*, pp. 31–40. Rutgers N.J., 30 July 1996.

James L. Caldwell: Formal Methods Technology-Transfer: a View from NASA. In S. Gnesi and D. Latella, editors, *Proceedings of the ERCIM Workshop on Formal Methods for Industrial Critical Systems*, pp. 1–16, Oxford England, March 1996.

Ricky W. Butler, James L. Caldwell, Victor Carreno, Michael Holloway, Paul Miner and Ben L. Di Vito: NASA Langley's Research and Technology Transfer Program in Formal Methods. In *Proceedings of the 10th Annual Conference on Computer Assurance (COMPASS 95)*, Gaithersburg, MD, June 1995.

Ricky W. Butler, James L. Caldwell, and Ben L. Di Vito: Design strategy for a formally verified reliable computing platform. In *6th Annual Conference on Computer Assurance (COMPASS 91)*, pp. 125–133, Gaithersburg, MD, June 1991, IEEE Press.

Ben L. Di Vito, Ricky W. Butler, and James L. Caldwell: High level design proof of a reliable computing platform. In *Proceedings 2nd IFIP Working Conference on Dependable Computing for Critical Applications*, pp. 124–136, Tucson, AZ, February, 1991.

Paul S. Miner and James L. Caldwell: A HOL theory for voting. In *NASA Formal Methods Workshop 1990*, pp. 442–456, NASA CP-10052, November 1990.

Dragomirecky, M; Caldwell, J; Hartman, M; Jasica, J.; Smith, W.D.; Duff, D. and d'Abreu, M. A.: Face core environment: The model and its application in CAE/CAD tool development. In *Proceedings of the 1989 26th ACM/IEEE Conference on Design Automation*, pp. 466–471, 1989, ACM Press.

Theses

James L. Caldwell: *Decidability Extracted: Synthesizing "Correct-by-Construction" Decision Procedures*. Cornell University Ph.D. Thesis, August, 1998. Available as Computer Science Tech. Report TR98-1722.

Unrefereed Reports and Articles

S. Kothari and J. Caldwell. *Wand's Algorithm extended for the Polymorphic ML-Let*. pp. 32, December, 2007. Technical Report, Department of Computer Science, University of Wyoming.

<http://www.cs.uwyo.edu/~skothari/typeinference/report.pdf>.

Qichang Chen, Liqiang Wang, Zijiang Yang, Scott D. Stoller, and James Caldwell. *HAVE: Integrated dynamic and static analysis for atomicity*. Technical report, Department of Computer Science, University of Wyoming, December 2007.

James Caldwell: *Logic and Discrete Mathematics for Computer Scientists*, Manuscript used in COSC 2300, pp.152 + xi, April 2007.

<http://www.cs.uwyo.edu/~jlc/papers/>.

James Caldwell: *Graduate Handbook, Department of Computer Science*, pp. 19 + ii, September, 2005. http://www.cs.uwyo.edu/~jlc/graduate_program/Graduate_Handbook.pdf.

James Caldwell and Christoph Jechlitschek: A Framework for Interactive Sharing and Deductive Searching in Distributed Heterogeneous Collections of Formalized Mathematics. in *Emerging Trends, Proceedings of the 17th International Conference in Theorem Proving in Higher Order Logics: TPHOL 2004*, Park City, Utah, USA September, 2004. Conrd Slind (ed.), School of Computing, University of Utah.

Tjark Weber and James Caldwell: Quicksort via Bird's Tree Fusion Transformation.

Published online at the Formal Digital Libraries Project, May, 2003

<http://www.nuprl.org/Algorithms/?Algorithms=Algorithms>.

Robert L. Constable, Stuart Allen, Mark Bickford, James Caldwell, Jason Hickey, and Christoph Kreitz: *Steps Toward a World Wide Digital Library of Formal Algorithmic Knowledge* Volumes I and II, Materials presented to the DoD MURI program review, at the Office of Naval Research, grant N00014-01-1-0765, October 2003.

Charles Pecheur, James Caldwell, Reid Simmons, and Willem Visser: Verification and Validation of Autonomous and Adaptive Systems, Report from the RIACS Workshop, February 2001. Available online at <http://ase.arc.nasa.gov/vv2000/asilomar-report.html>

Jeffery Van Baalen and James Caldwell: Computer Science Department, Five Year Plan, November 2000. Available online at http://www.cs.uwo.edu/five_year_plan.html

Ben L. Di Vito, Ricky W. Butler, and James L. Caldwell: *Formal design and verification of a reliable computing platform for real-time control (Phase 1 results)*. NASA Technical Memorandum 102716, October 1990.

James L. Caldwell, Ricky W. Butler, and Ben L. Di Vito: Hierarchical approach to specification and verification of fault-tolerant operating systems. In *DARPA/Army Workshop on Software Tools for Distributed Intelligent Control Systems*, Pacifica, CA., July 1990.

James L. Caldwell: *Matching Problems in a Generalized Hypergraph Model*. Submitted in partial requirement for M.S., Department of Computer Science, State University of New York at Albany, June 1988.

Presentations and Talks

Logic in Computer Science, A personal view., Invited lecture to CS3202 Logic, Specification and Verification, University St Andrews, St. Andrews UK, 4 March 2008.

Research Themes in Proofs and Programs., Functional Programming Research Group, University St Andrews, St. Andrews UK, 8 February 2008.

On a Framework for Interactive Sharing and Deductive Searching in Distributed Heterogeneous Collections of Formalized Mathematics. TPHOL 2004, September 16, 2004, Park City Utah.

Remarks on the theory of flat data-spaces, abstract identifiers and structured texts. MURI Grant Review, October 31 2003, Office of Naval Research, Arlington VA.

Architectures for distributed FDL's: A client/server basis for peer-to-peer interaction. MURI Grant Review, October 31 2003, Office of Naval Research, Arlington VA.

Representing Nuprl Proof Objects in ACL2: toward a proof checker for Nuprl. Third International Workshop on the ACL2 Theorem Prover and Its Applications (ACL2-2002), April 8, 2002, Grenoble, France.

Extracting Recursion Operators in Nuprl's Type Theory. LOPSTR 2001, the Eleventh International Workshop on Logic-based Program Synthesis and Transformation, November 30, 2001, Paphos, Cyprus

Interactive Digital Libraries of Formalized Algorithmic Knowledge. First International Workshop on Mathematical Knowledge Management, RISC, A-4232 Schloss Hagenberg, Linz Austria, 24 September, 2001

Programming with proofs, and proving programs. Department of Computer Science, Colorado State University, Fort Collins, Colorado, 20 April 2000.

Extracting call/cc from Nuprl Proofs. Department of Computer Science, Indiana University, Bloomington, Indiana, 31 March 2000.

Programming with proofs, and proving programs. Department of Computer Science, New Mexico State University, Las Cruces, New Mexico, 10 March 2000.

Applications of Constructive Proofs in Computer Science, University of Wyoming Math Department Colloquium, Laramie, WY, 2 March 2000.

Proofs-as-Programs: from the Curry-Howard Isomorphism to Programming Practice. An talk given to the University of Wyoming Logic Society, Laramie, WY, 6 December 1999.

Intuitionistic Tableau Extracted. A talk given at TABLEAUX'99, Saratoga Springs, NY, 10 June 1999.

Classical Propositional Decidability via Nuprl Proof Extraction. A talk given at TPHOLs'98, Canberra, Australia, 29 September 1998.

Formal Methods: Industrial Applications from the NASA Portfolio. An invited talk given at Raytheon Systems Canada Ltd., Richmond, British Columbia, 22 May 1998.

Applications of Proofs-as-Programs in Practice. An invited talk given at the University of Wyoming, Laramie, WY, 30 April 1998.

Extracting Readable and Efficient Programs from Nuprl Proofs. Presented at the PRL seminar, Cornell University, Ithaca, NY, 18 Nov 1997.

Moving Proofs-as-Programs into Practice. A presentation given at the 12th IEEE International Conference Automated Software Engineering (ASE'97), Incline Village, NV, 5 Nov 1997.

Classical tools for constructive proof search. A presentation given at the Workshop on Proof search in type-theoretic languages held in conjunction with CADE-13, Rutgers N.J., 30 July 1996.

A Constructive account of Correct-by-construction. A talk given at NASA Langley Research Center, Hampton, VA, 26 April 1996.

Decidability Extracted: Correct-by-construction Decision Procedures. An invited talk given at Odyssey Research Associates, Ithaca, NY, 4 April, 1996.

Formal Methods Technology Transfer: A View From NASA. An invited presentation given at the Laboratory for Foundations of Computer Science at University of Edinburgh, Scotland, 28 March 1996.

Formal Methods Technology Transfer: A View From NASA. A presentation given at the ERCIM Workshop on Formal Methods for Industrial Critical Systems at Saint Hughes College, Oxford University, Oxford England, 19 March 1996.

Propositional Decidability Extracted; A Nuprl proof and extracted decision procedure. An oral presentation given on the occasion of my A-exam, Cornell University, Ithaca, NY, 28 March 1995.

Industrial applications of formal methods, experiences from NASA. Presented at the Nuprl Seminar, Cornell University, Ithaca, NY, 7 February 1995.

Type theory, λ -calculus, the Curry-Howard Isomorphism and all that. A talk presented at the Formal Methods and Software Engineering Seminar, NASA Langley Research Center, Hampton, VA, 30 September 1994.

Formal verification of fault-tolerant systems for Hybrid Applications. An invited presentation given at the Hybrid Systems Workshop, Mathematical Sciences Institute, Ithaca, NY, 10-12 June 1991.

Close Enough For Government Work: Reflections on Models of Faulty State Machines. Presented at the First NASA Langley Formal Methods Workshop, Hampton, VA, August 1990.

Hierarchical Specification and Verification. A talk presented at the Workshop on Software Tools for Distributed Intelligent Control, DARPA, Pacifica CA, 17 July 1990.

Contracts and Grants

Pending

Co-PI (Submission to the NASA Wyoming EPSCoR program.) *High-Confidence Data Intensive Software Systems* Joint with Liqiang Wang, Ruben Gamboa, and Jeffrey Van Baalen (2008–2011) \$752,887.

Co-PI (Submitted in response to NSF 07-587, Foundations of Computing Processes and Artifacts (CPA)) *CPA-SEL: Integrated Static and Dynamic Analysis for Large-Scale Concurrent Software Systems*. Joint with Liqiang Wang (2008–2009) \$271,660

Current

Fellowship EP/F031114/1 *Proof theory and constraint satisfaction* (With Ian Gent and Roy Dyckhoff at University of St. Andrews), UK Engineering and Physical Sciences Research Council £ 44,237 (January 2008 – June 2008)

Co-PI (NSF 0613919) - Science of Design Program, *SoD-HCER: Comprehensibility as a Design Criteria*. Research Experiences for Undergraduates (REU supplement to NSF 0613919). (2008) \$12,240.

Co-PI (NSF 0613919) - Science of Design Program, *SoD-HCER: Comprehensibility as a Design Criteria*. Joint with Ruben Gamboa(PI). (2006–2008) \$157,428.

Previous Funding

Co-PI (NSF MRI-0216592) *Acquisition of a Network of Workstations Serving as a Platform for Distributed Automated Theorem Proving* (With Ruben Gamboa and Jeffery Van Baalen), NSF \$82,530 (2002-2004) UW \$35,000

PI (NSF CCR-9985239) *CAREER: A formal programming methodology with applications to developing automated verifiers*. \$213,195 (2000–2004)

Co-PI (ONR N00014-01-1-0765) *Building Interactive Digital Libraries of Formal Algorithmic Knowledge*, Joint with Cornell University and California Institute of Technology. Wyoming \$152,596, (2001–2004)

PI (Rockwell-Collins) *Class Projects in Formal Verification Methods*, (with John Cowles and Jeffery Van Baalen). Rockwell Collins University Trust Grant, \$19,500, (2001–2002)

PI (University of Wyoming) *Formal Specification and Verification of Agent Based Computing Protocols*. (With Shivakant Mishra) University of Wyoming Faculty grant in aid, \$5000 (September 1999 - May 2000)

PI (University of Wyoming) International Travel Grant, St. Andrews University, St. Andrews, Scotland, \$1000, (March 2000)

Professional Activities

Memberships

Association for Symbolic Logic, European Association for Theoretical Computer Science (EATCS)

Other

Reviewer, International Journal of Computer Mathematics, 2008

Panel Reviewer, National Science Foundation, CISE, Arlington Va. Fall, 2005

Reviewer, International Joint Conference on Artificial Intelligence (IJCAI-2005)

Program Committee, CLVASE \exists (Constructive Logic for Automated Software Engineering) 2005, Edinburgh, 3 April 2005.

Panel Reviewer, National Science Foundation, CISE, Arlington Va. Fall, 2004

Program Committee, LOPSTR 2003, International Symposium on Logic-based Program Synthesis and Transformation.

Reviewer, 2002 Wyoming DEPSCOR.

Program Committee, MKM 2002, The Second International Workshop on Mathematical Knowledge Management.

Program Committee, LOPSTR 2002, International Symposium on Logic-based Program Synthesis and Transformation.

Reviewer, IEEE Transactions on Parallel and Distributed Systems, 2001.

Panel Reviewer, National Science Foundation, CISE, Arlington Va. Fall, 2001

Reviewer: 15th *IEEE International Conference on Automated Software Engineering* 2000.

Invited Reviewer, FormalWARE Project Review, Department of Computer Science, University of British Columbia, Vancouver, Canada, 21 May 1998.

Program Committee, Lfm97, The Fourth NASA LaRC Formal Methods Workshop, Hampton, VA, 1997.

Panel Chair, Researcher Perspectives on Formal Methods. Third NASA LaRC Formal Methods Workshop, Hampton, VA, 1995

Referee: Fourth International Conference on Principles and Practice of Constraint Programming, CP'98; COMPASS 1996; IFIP Working Conference on Dependable Computing for Critical Applications, DCCA-5, 1995; IFIP Working Conference on Dependable Computing for Critical Applications, DCCA-4, 1993; FTCS-19, The Nineteenth International Symposium on Fault Tolerant Computing, 1989.

Session Chair, Workshop on Hardware Specification, Verification and Synthesis: Mathematical Aspects. Mathematical Sciences Institute, Cornell University, July 1989.

Teaching and Advising

Courses

Year	Semester	Course	Credits	Enrollment
2007	Fall	(COSC 3015) Functional Programming	3	18
2007	Fall	(COSC 2300) Discrete Structures	3	25
2007	Spring	(COSC 4780) Principles of Programming Languages	3	19
2007	Spring	(COSC 2300) Discrete Structures	3	18
2006	Fall	(COSC 3015) Functional Programming	3	19
2006	Fall	(COSC 5010) Constructive Mathematics and Logic in CS	3	5
2006	Spring	(COSC 4780) Principles of Programming Languages	3	18
2006	Spring	(COSC 2300) Discrete Structures	3	22
2005	Fall	(COSC 2300) Discrete Structures	3	16
2005	Fall	(COSC 5880) Software Verification & Validation	3	6
2005	Spring	(COSC 4780) Principles of Programming Languages	3	26
2004	Fall	(COSC 2300) Discrete Structures	3	16
2004	Fall	(COSC 5880) Software Verification & Validation	3	5
2004	Spring	(COSC 4780) Principles of Programming Languages	3	29
2003	Fall	(COSC 5010) Distributed and Fault-tolerant Algorithms	3	6
2003	Fall	(COSC 2300) Discrete Structures	3	30
2003	Spring	(COSC 4780) Principles of Programming Languages	3	41
2003	Spring	(COSC 5000) Seminar: Research methods for Computer Science	1	17
2002	Fall	(COSC 2300) Discrete Structures	3	37
2002	Spring	(COSC 4780) Principles of Programming Languages	3	33
2001	Fall	(COSC 5020) Constructive Type Theory	3	5
2001	Fall	(COSC 5880) Software Verification & Validation	3	16
2001	Spring	(COSC 4780) Principles of Programming Languages	3	38
2000	Fall	(COSC 5880) Software Verification & Validation	3	21
2000	Spring	(COSC 4780) Principles of Programming Languages	3	29
2000	Spring	(COSC 2300) Discrete Structures	3	19
1999	Fall	(COSC 5200) Computational Complexity	3	14
1999	Fall	(COSC 2300) Discrete Structures	3	18
1999	Spring	(COSC 5120) Theory of Computation	3	15
1999	Spring	(COSC 5000) Seminar: Algorithmic Formal Methods	1	18
1998	Fall	(COSC 2300) Discrete Structures	3	21

Ph.D. Students Currently Under Supervision

Sunil Kothari

Josef Pohl

MS Students Currently Under Supervision

Huiyuan Ma

MS Students Supervised

Osamu Goto, *Implementing Amtoft's Call-by-Name to Call-by-Value Transformation for Untyped Computational Terms*, Plan B M.S. Project, August 2001.

Scott K. Johnson, *Program Extraction from Single and Multi-Succedent Intuitionistic Propositional Proofs*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, December 2002.

Tjark Weber, *Program Transformations in Nuprl*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, August 2002.

Vitali Khaikine, *Projecting Formal Proofs into XML: Nuprl into HELM*, Plan B M.S. Project, August 2003.

Christoph Jechlitschek, *Sharing Mathematical Knowledge in a Distributed Environment – a P2P Approach*. M.S. Thesis, Dept. of Computer Science, University of Wyoming, May, 2004.

MS Committees

Ryan C. Harkins, *Applications of Resource-Bounded Measure in Double-Exponential Time*. M.S. Thesis, Dept. of Computer Science, University of Wyoming, 2006.

Jan-Eric Duden, *An Improved Approach to Real-Time Beat-Induction from Digital Audio Signals*, M.S. Thesis, Department of Computer Science, University of Wyoming, May 2002.

Thomas Böhne, *A General Intruder for Security Protocols in Maude*, M.S. Thesis, Department of Computer Science, University of Wyoming, May 2002.

Nija Shi, *Techniques to Improve the Performance of CORBA Applications*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2001.

Bruce Allen Peterson, *Adaptive System Design based on Psychology Experiments and Multi-Agents*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2001.

Scott Clark McDaniel, *Authorized Access Only: Designing and Implementing Secure Networking and Authorized Remote Access to NASA's Countermeasures Evaluation and Validation Project Data*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2001.

Tzulip Phang, *The development of a dynamic algorithm to create restriction sites using all possible combinations of silent mutations on a DNA sequence*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2001.

Sankaranar Srinivasan, *ISA: An Internet Security Agent*, M.S. Thesis, Department of Electrical Engineering, University of Wyoming, December 2001.

Carl L. Bartlett, *Automated pipeline expansion and management for a coordination model.*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2000, (Co-advised with Haines)

Alan K. Bennett, *Dynamic bookmarking and personal history search engines*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2000, (Co-advised with Haines)

David R. Nelson, *Implementing user-determined cache updating.*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2000, (Co-advised with Bailey)

John Paul, *Two Verified Implementations of the Projective Group for a Coordination Model*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, May 2000.

Phil Anzel, *Translation of semi-Structured Text Documents*, M.S. Thesis, Dept. of Computer Science, University of Wyoming, December 2000.

Undergraduate Honors Students

Spencer Sharpe, *Formalizing Grice: Uterer's meaning and intention.*, Undergraduate honors paper and presentation. April 28, 2007

Undergraduate Advises 33

Service

University Committees

Ad Hoc Committee for MIS/E-commerce (Business/Arts and Sciences) (1999)

Engineering College Committees

Graduate Studies and Research Committee [chair] (2005–2006)

Engineering College Tenure and Promotion Committee (2005-2007)

International Engineering Program (IEP) Committee (2002–2006)

Library Committee (2001–2002)

Computer Science Department Committees

Faculty Search Committee (2006–2007)

Graduate Student Coordinator (2003–2006)

Faculty Search Committee [Chair] (2000–2002)

Faculty Search Committee (2002–2003)

Department Webmaster (2000–2003)

Library Committee (1999–2005)

Graduate Applications Reader (1998–2001)

Colloquium Committee (1998–1999)

Academic Planing Committee (1998)