Dr. Andrew J. Felt
Detailed Curriculum Vitae

August 17, 2011

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Chapter 1

Education and Work History

08/2006–present	Associate Professor of Mathematics, UW-Stevens Point
08/2000–05/2006	Assistant Professor of Mathematics, UW-Stevens Point
08/1995–08/2000	Ph.D., Pure and Applied Mathematics, Washington State University, Pullman, WA Thesis: A Computational Evaluation of Interior Cutting Plane Algorithms for Stochastic Optimization
08/1994–05/1995	Department of Mathematics, University of Idaho, Moscow, ID
08/1989–08/1994	Chemical Engineer, Exxon Company, U.S.A, Baton Rouge, LA
08/1985–08/1989	B.S. with Highest Distinction, Chemical Engineering, University of Wisconsin–Madison

Chapter 2

Teaching Performance

My teaching strategy focuses on connecting the material to students' lives, deep understanding rather than memorization, and thorough skill development through regular homework.

I am motivated to learn mathematics by applications. In every course I teach, I try to motivate the students by connecting the skills they learn to real life situations where the skills can be used. In Math 1xx, this means making references to things they might study, such as the population of wolves in the Chequamegon National Forest. In Math 209, I make reference in each section to applications in the information sciences.

Applications are integral to each upper level course I teach, so it is not difficult to find *real* projects for the class to work on. In Operations Research, I choose a new project each time—one that I have not tried to solve, so that I do not influence the problem-solving direction of the class. The students enjoy having a real guest client come to class to present the problem. The class then works to solve the problem using skills learned in class.

I collect and grade regular homework in all classes. I do not enjoy grading homework, but I cannot find a better way to enforce careful writing skills. I believe that careful, accurate writing not only reflects careful, logical thought, but encourages it. The kinds of skills learned in the 100 level courses cannot be learned all at once, so assignments are made and collected nearly every day.

Since joining UWSP, I have cheerfully accepted all advising assignments given to me. This usually means that I have between five and eight advisees at any time.

Courses Taught at UWSP

Math 109, Mathematics for the Social and Management Sciences.

Math 111, Applied Calculus.

Math 112, Basic Trigonometry and Applications.

Math 119, Precalculus Trigonometry.

Math 120, Analytic Geometry and Calculus I.

Math 209, Mathematics for Information Sciences. I helped to develop this course at UWSP and am one of the two primary instructors for this course. I attended a workshop (Valparaiso, IN) about this type of course.

Math 220, Introduction to Linear Algebra and Differential Equations.

Math 222, Analytic Geometry and Calculus III.

Math 310, Operations Research I. Since joining UWSP, I have been the sole instructor for this course and for Math 315 and Math 367. In Math 310, the core topics are linear programming and network problems. In about 2003, we reduced the prerequisites for this course. This required a change in the way I taught the course but allowed business and CIS majors to more easily include the course in their study program. About the same time, I began to include a mathematical modeling language in this course, which may now be one of the most important parts of the course. In Fall 2009, I swapped mixed integer linear programming into Math 310 from Math 315, and will move graph and transportation algorithms into Math 315 from Math 310.

Math 315, Operations Research II. The main topics have been smooth nonlinear optimization and integer linear programming. I changed this course quite a bit since I first taught it. It is now a writing emphasis course. In addition, I now choose for the class a practical project that will use techniques learned in the course. For example, in Spring 2004 we looked at the problem of assigning students to elementary schools in Stevens Point. This led to a follow-up study by undergraduate researchers that produced a publication. In Spring 2006 the special project was creating a basketball schedule for the WIAC (the Pointers' athletic conference). This led to the creation of the Center for Athletic

Scheduling. In Spring 2009 the special project was creating a complete schedule for PJ Jacobs Jr. High in Stevens Point. While the project fulfilled its educational goals, it did not produce results that were immediately useful to the client.

Math 355, Elementary Statistical Methods.

Math 367, Mathematics of Decision and Choice. The class has also included special projects at the end of the semester.

Speakers Brought to UWSP

11/30/2010	Guest speaker for Math 310: Patricia D'Ercole, Director, UWSP Aber Suzuki center.
4/5/2010	Guest speaker for the Math Club: Josh Garbe, Sentry Insurance.
2/18/2009	Guest speaker for Math 315: Jennifer Ries, Guidance Counselor (and scheduler), P. J. Jacobs Jr. High School.
2/8/2006	Guest speaker for Math 315: Gary Karner, Commissioner, Wisconsin Intercollegiate Athletic Conference.
12/6/2005	Guest speaker for Math 310: Andrew Miller, Industrial and Systems Engineering Department, UW-Madison.
Spring 2004	Guest speaker for Math 315: Jim Nicewander, Stevens Point Public Schools.
11/8/2002	Guest speaker in operations research: Dr. Ted Gifford, Director, Research and Development, Schneider National, Inc., Green Bay.
11/30/2001	Guest speaker in operations research: Joe Tritz, Actuary, The Noel Group.
04/23/2001	Guest speaker in operations research: Dr. Ramesh Sachdeva, Executive Director, Quality and Outcomes Management, Children's Hospital, Milwaukee.

Student Evaluations

Using the "old" evaluations[1]

semester	course	sec.	number of responses	overall[2]	course[3]	semester average[4]
F2000	109	1	14	3.14	3.08	
	109	4	26	3.54	3.20	
	310	1	15	3.80	3.73	3.51
S2001	111	1	28	3.57	3.54	
	111	3	23	3.70	3.48	
	367	1	24	3.52	3.43	3.59
F2001	109	2	27	3.81	3.52	
	109	4	26	3.54	3.31	
	119	1	14	3.64	3.36	
	310	1	12	4.0	4.0	3.72
S2002	111	2	27	3.86	3.50	
	111	3	30	3.70	3.53	
	315	1	7	3.86	3.86	3.78
F2002	222	1	10	3.70	3.70	
	222	2	17	3.94	3.88	
	310	1	14	3.93	3.86	3.88
S2003	209	1	20	3.80	3.70	
	209	2	23	3.62	3.50	
	367	1	15	3.93	3.80	3.76
F2003	209	2	29	3.83	3.72	
	355	7	31	2.94	2.75	
	310	1	17	3.94	3.82	3.50
S2004	112	1	27	3.52	3.37	
	209	1	15	3.53	3.47	
	209	2	9	3.78	3.67	
	315	1	5	4.0	4.0	3.62

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[1]A=4, B=3, C=2, D=1, F=0
[2]question 6: My overall evaluation of the instructor's teaching is
[3]question 7: My overall evaluation of the course is
[4]weighted average of question 6

Using the "new" evaluations[5]

semester	course	sec.	number of responses	overall[6]	course[7]	semester average[8]
F2004	111	1	24	1.1	1.2	
	111	3	30	1.2	1.4	
	310	1	23	1.1	1.1	1.147
S2005	209	1	10	1.0	1.1	
	209	2	7	1.1	1.1	
	367	1	24	1.1	1.3	1.075
F2005	120	1	21	1.3	1.3	
	209	1	8	1.1	1.2	
	310	1	25	1.2	1.3	1.198
S2006	109	2	26	2.5	2.8	
	209	1	12	1.0	1.1	
	315	1	13	1.2	1.2	1.816
F2006	120	1	23	1.3	1.4	
	209	1	19	1.2	1.5	
	310	1	18	1.4	1.7	1.281
S2007	209	1	19	1.1	1.5	
	220	2	15	1.0	1.1	
	367	1	26	1.1	1.3	1.075
F2008[9]	109	4	23	1.4	1.9	
	109	6	25	1.3	1.8	
	310	1	22	1.1	1.1	1.270
S2009	111	1	22	1.4	1.7	
	111	2	22	1.2	1.3	
	112	1	24	1.5	1.9	
	315	1, 2	11	1.1	1.3	1.333
F2009	111	1	29	1.2	1.6	
	209	1	18	1.1	1.2	
	310	1	21	1.1	1.3	1.124
S2010	111	2	25	1.3	1.8	
	209	1	27	1.4	1.5	
	367	1	27	1.1	1.1	1.266
F2010	111	2	30	1.4	1.9	
	111	4	23	1.2	1.2	
	310	1	18	1.2	1.2	1.278
S2011	111	2	29	1.4	1.7	
	209	1	17	1.1	1.4	
	315	1, 2	11	1.1	1.1	1.253

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[5]1=strongly agree; 5=strongly disagree
[6]question 18: Overall, the instructor taught this course effectively
[7]question 11: Overall, this was a good course
[8]weighted average of question 18
[9]F2007: semester abroad; S2008: sabbatical

Chapter 3

Professional Disciplinary Growth/Scholarship

3.1 Scholarly Activity

My scholarly activity started in the narrow field of stochastic linear programming and has branched into several other areas.

In the field of stochastic linear programming, I coded parallel implementations of cutting plane algorithms for solving such problems as part of my doctoral dissertation. Part of this code is an open source SMPS input format reader, which I have totally rewritten since joining UWSP.

Another outgrowth from my dissertation is a collection of test problems for stochastic linear programming. The purpose of the collection is to allow researchers to test new algorithms on a standard set of problems, so that algorithm comparisons may be made. Since joining UWSP, I have added problems to the collection and improved the distribution method. My work with Ariyawansa and Cacho involved a new problem for the collection.

I also did some work in the field of model predictive control (MPC), an area I was familiar with from my days as a software developer and engineer. I developed a new stochastic model for MPC, and adapted an algorithm from stochastic linear programming to solve the model.

Some of the special projects that my classes worked on grew into research projects. These include the analysis of the board game "Brücken und Tunnel," the analysis of elementary student assignment in Stevens Point, the development of a scheduling model for Math courses in my department, and the creation of the 2007–2008 and 2008–2009 men's and women's basketball schedules for the Wisconsin Intercollegiate Athletic Conference (WIAC).

An outgrowth of the WIAC project was the Center for Athletic Scheduling (CAS), which I have directed since 2006. A thorough narrative of the CAS can be found in Appendix A.

Publications

Andy Felt, Chris Natzke and Danielle Morey, "Elections, Math, and the Best and Worst Ways to Choose a Leader," MIT Blended Learning Open Source Science or Math Studies video, `http://blossoms.mit.edu`, 2011.

Andrew J. Felt, et. al., "Voting Systems," DIMACS Educational Module 10-4, Rutgers University, January, 2011.

Andrew J. Felt and George Kung, *Math Fun for Suzuki Families: Inject fun (and math skills) into your practice, Part 1 (for ages 3–5) and Part 2 (for ages 5–7)*, Suzuki Association of the Americas, 2011.

A. J. Felt and Linda Lesniak, "Can you build a geodesic dome?" chapter in *Resources for Teaching Discrete Mathematics*, editor Brian Hopkins, Mathematics Association of America Notes Series, 2009.

Andrew J. Felt, Ryan J. Koelemay and Alexander Richter, "Using flexible busing to meet average class size targets," *Planning & Changing*, 39, Fall/Winter 2008.

K. A. Ariyawansa and A. J. Felt, "A computational evaluation of cutting plane algorithms based on volumetric centers and analytic centers for two stage stochastic linear programs," Technical Report, UWSP Library epublication, February 16, 2007.

Faculty sponsor, Alexander W. Richter and Nathaniel A. Throckmorton, "School District Student Assignment Model: Mapping the Sixth Grade Class of 2004–05," UWSP Online Journal, IV, Spring 2006.

Andrew J. Felt and the students of UWSP Math 315: Operations Research II, Spring, 2006, "Scheduling the WIAC Basketball Season," technical report, UWSP Library epublication, March 10, 2006.

Andrew J. Felt, Alexander Richter, Nathaniel Throckmorton, "A different way to assign students to elementary schools in Stevens Point, WI," technical report submitted to the Stevens Point Area Public School District Superintendent, January, 2006.

K. A. Ariyawansa, C. Cacho and A. J. Felt, "A Family of Stochastic Programming Test Problems Based on a Model for Tactical Manpower Planning," *Journal of Mathematical Modeling and Algorithms*, 4 (4), December 2005, pp. 369–390.

K. A. Ariyawansa and A. J. Felt, "On a collection of test problems for stochastic programming," *INFORMS Journal on Computing*, 16 (3), Summer 2004, pp. 291–299.

A. J. Felt, "Code Breaking in the Classroom: Using Math and Having Fun," *ENC Focus*, 12 (25) (2004).

A. J. Felt, "Stochastic linear model predictive control using nested decomposition," *Proceedings of the American Control Conference*, Denver, CO, 4 (2003), pp. 3602–3607.

A. J. Felt, "LINDO API, Linear, quadratic, MIP callable library," (software review), *OR/MS Today*, 29 (6) December (2002), pp. 58–60.

K. A. Ariyawansa and A. J. Felt, "A collection of test problems for stochastic programming," Technical Report 00-3, Department of Pure and Applied Mathematics, Washington State University, Pullman, WA, September 2000.

Presentations

A. J. Felt and Eric Pahl (co-presenters), "The UW-Stevens Point Center for Athletic Scheduling," INFORMS Annual Meeting, San Diego, CA, 12 October, 2009 (invited).

A. J. Felt (presenter), "Math Vitamins: A book full of ideas for incorporating early math skills in your practice sessions - developed by Suzuki Dads/UWSP Math Professors," American Suzuki Institute, UWSP, 29 July, 2009.

A. J. Felt (presenter), "Parallel interior cutting plane algorithms for solving stochastic linear programming problems," UWSP AITP meeting, 7 March, 2007.

A. J. Felt (presenter), "MILP Model for University Timetabling," Nineteenth International Symposium on Mathematical Programming, Rio de Janeiro, Brazil, 2 August, 2006.

A. J. Felt (presenter), "SLPlib software library for reading SMPS format," X International Conference on Stochastic Programming, Tucson, AZ, 13 October, 2004.

K. A. Ariyawansa, Cristina Cacho (presenter) and A. J. Felt, "On the Construction of a Family of Stochastic Programming Test Problems," INFORMS Annual Conference, Atlanta, GA, 22 October 2003.

A. J. Felt (presenter), "Stochastic model predictive control using nested decomposition," American Control Conference, Denver, CO, 5 June 2003.

A. J. Felt (presenter), "Stochastic model predictive control using nested Benders decomposition," Chemical Engineering Department seminar, UW-Madison, 12 May 2003 (invited).

K. A. Ariyawansa, A. J. Felt, J. Sarich (presenter) and R. O'Fallon, "On the computational performance of a volumetric center algorithm for stochastic programming," INFORMS Annual Conference, San Jose, CA, 19 November 2002.

A. J. Felt (presenter), "Modern optimization problems," Gustavus Adolphus University Math Seminar, 8 October, 2002.

K. A. Ariyawansa, A. J. Felt (presenter) and J. Sarich, "Recent numerical experience with an implementation of the volumetric center cutting plane algorithm for stochastic programming," SIAM Conference on Optimization, Toronto, Canada, 20-22 May, 2002.

K. A. Ariyawansa and A. J. Felt (presenter), "A Collection of Multistage Stochastic Linear Programming Test Problems", IX International Conference on Stochastic Programming, Berlin, Germany, 28 August, 2001.

K. A. Ariyawansa and A. J. Felt (presenter), "A parallel implementation of interior cutting plane algorithms for two stage stochastic linear programming", Argonne National Laboratory, Mathematics and Computer Science Division Colloquium, Chicago, IL, 22 August, 2001 (invited).

K. A. Ariyawansa, A. J. Felt (presenter) and J. Sarich, "Open Source Input Routine for SMPS Data", INFORMS International Conference, Maui, Hawaii, 18 June, 2001 (invited).

A. J. Felt (presenter), "Game theory, medicine men, God, antibiotics, evolution and dynamics", UWSP Math Colloquium, 30 March, 2001.

Undergraduate Research Presentations

4/29/2011	Faculty sponsor, "Math Minerals," presented by Jamie Briquelet et al. at the UWSP L&S Undergraduate Research Symposium.
4/29/2011	Faculty sponsor, "Using Mathematical Optimization to Schedule a Large Conference," presented by Scott Strand and Yin Xu at the UWSP L&S Undergraduate Research Symposium.
4/15/2011	Faculty sponsor, "Center for Athletic Scheduling Keeps the Wisconsin Idea Alive," poster by Gretchen Peterson at Chancellor's Inauguration, UWSP.
4/15/2010	Faculty sponsor, "The Center for Athletic Scheduling at UWSP," presented by Kyle Gorski at the National Conference for Undergraduate Research in Missoula, MT.
4/25/2009	Faculty sponsor, "UWSP Center for Athletic Scheduling," presented by Eric Pahl at the MAA regional meeting in LaCrosse, WI.
4/24/2009	Faculty sponsor, "UWSP Center for Athletic Scheduling," presented by Eric Pahl at the UWSP Undergraduate Research Symposium.
3/31/2009	Faculty sponsor, "UWSP Center for Athletic Scheduling," presented by Eric Pahl and Nate Pollesch to the UWSP Math Club.
4/28/2007	Faculty sponsor, "UWSP's Center for Athletic Scheduling," presented by Brad Helf, Alexander Richter, and Lisa Schmidt at UWSP L&S Undergraduate Research Symposium.
2/5/2007	Faculty sponsor, "A Potential Solution to Rising Student-Teacher Ratios," presented by Ryan J. Koelemay and Alexander W. Richter to the Business Services/Personnel committee of the Stevens Point Area Public School Board, Stevens Point, WI.

10/21/2006	Faculty sponsor, "Model and Estimation of Efficient Teacher Allocation Systems," presented by Ryan J. Koelemay and Alexander W. Richter at the Nineteenth Meeting of the Wisconsin Economics Association, Stevens Point, WI.
4/29/2006	Faculty sponsor, "A better way to assign new students to elementary schools," presented by Alexander W. Richter and Ryan J. Koelemay at UWSP L&S Undergraduate Research Symposium.
11/5/2005	Faculty sponsor, "A feasible solution versus the optimal solution," presented by Alex Richter at Twentieth Annual St. Norbert College Pi Mu Epsilon Regional Undergraduate Mathematics Conference, St. Norbert College, De Pere, WI.
4/30/2005	Faculty sponsor, "Balancing multiple interests with school busing and child/school assignment," presented by Michael Kreeger at UWSP L&S Undergraduate Research Symposium.
4/24/2004	Faculty sponsor, "Betting on Brucken and Tunnel," presented by Michael Kreeger at UWSP L&S Undergraduate Research Symposium.

Grants Awarded

Summer 2010	MIT BLOSSOMS grant to create video on voting methods for the BLOSSOMS Video Library, with student Chris Natzke.
Summer 2006	UWSP UEI Grant to Create a Center for Athletic Scheduling at UWSP, with Alex Richter and Ryan Koelemay.
Fall 2005	UWSP UEI Grant to Further Study the Assignment of Students to Elementary Schools in Stevens Point, WI, with Alex Richter and Ryan Koelemay.
Fall 2004	UWSP UEI Grant to Study the Assignment of Students to Elementary Schools in Stevens Point, WI, with Michael Kreeger.

3.2   Curricular Development

In 2002 I helped develop a new course to UWSP, Math 209, Mathematics for the Information Sciences. It was first offered in the Spring semester, 2003, and since then I have been one of the primary instructors. The DIMACS voting methods module developed into a piece of the Math 209 course. This module also led to the development of the voting methods video for BLOS-SOMS.

In 2003 I created a writing emphasis component to Math 315, Operations Research II. I added content to focus the course more on writing. I became qualified to teach writing emphasis courses and also led the effort to get Math 315 writing emphasis qualified. I have taught the course several times since as a writing emphasis class and plan to continue to do so.

3.3   Professional Development

Workshops and Conferences Attended

1/20/2011	Attended UWSP teaching workshop, "Breaking Bread: The Power of Faculty Learning Communities."
1/21/2010	Attended UWSP teaching workshop, "Enhancing Student Learning with Outcomes-Based Assessment."
1/14/2009	Attended UWSP teaching workshop, "Teaching in the New General Education Environment: Target 2010."
4/18/2008	Attended UWSP teaching colloquium, "Service-learning Project Development."
1/17/2007	Attended UWSP teaching workshop, "Literacies: Connecting across the Liberal Arts."
6/12-18/2005	Attended NSF/MAA sponsored DIMACS workshop, "Mathematics of Elections and Decisions," Montclair State University, NJ.
8/24/2004	Attended UWSP teaching workshop.
6/7–11/2004	Attended NSF/MAA sponsored workshop, "Nifty Applications in Discrete Mathematics," Valparaiso, IN.
1/15/2004	Attended UWSP Teaching Conference, "The Dynamics of Teaching in a Rapidly Changing World."
8/22/2002	Attended UWSP workshop, "Who are our students and

	how can we connect with them?"
8/22/2002	Attended UWSP workshop, "Facts, fallacies, pitfalls and promise: the use of student course evaluations to assess and improve teaching"
4/20/2001	Attended MAA WI meeting, DePere, WI.
1/18–19/2001	Attended Grant Writing Workshop, UW-Stevens Point.
1/17/2001	Attended Teaching/Learning Workshop, UW-Stevens Point.
10/26–27/2000	Attended Opening Workshop for New Science, Mathematics and Engineering Faculty, UW System Women and Science Program, Madison, WI.
8/7–11/2000	Attended International Symposium on Mathematical Programming, Atlanta, GA.
2000–2001	MAA WI Project Next Fellow.

Sabbatical Projects

Spring, 2008	Development of a Suzuki-like Mathematical Curriculum for Children. This sabbatical project resulted in the publication of the book *Math Vitamins for the Suzuki Student: Inject fun (and math skills) into your practice, Part 1 (for ages 3–5) and Part 2 (for ages 5–7)* with George Kung.

Professional Memberships

Society for Industrial and Applied Mathematics (SIAM)

Institute for Operations Research and the Management Sciences (INFORMS)

Mathematical Programming Society (MPS)

Chapter 4

General Educational Service

4.1   Departmental Committees

2008–present   Steering Committee, UWSP Department of Mathematical Sciences (chair 2010–2011).

2006–2007, 2008–2009, 2010–present   Math Major Committee, UWSP Department of Mathematical Sciences.

2001–2006, 2009–2010   Math Service Course Committee, UWSP Math/CIS Department (chair 2004–2005).

Fall 2010   Candidate Evaluation Committee, Weimin He.

Fall 2010   Candidate Evaluation Committee, Amod Damle.

Fall 2010   Candidate Evaluation Committee, Trudi Miller.

Fall 2010   Candidate Evaluation Committee, Patricia Jaberg.

Fall 2010   Candidate Evaluation Committee, Nancy Ericksson.

Fall 2009   Candidate Evaluation Committee, Michael Simmers.

Fall 2009   Candidate Evaluation Committee, Larry Steiner.

Fall 2009   Candidate Evaluation Committee, Anthony Ellertson.

Fall 2009   Candidate Evaluation Committee, Patrick Seeling.

2009–present   CNMT Department Personnel Committee.

Fall 2008   Candidate Evaluation Committee (chair), JoEllen Immel.

Fall 2008	Candidate Evaluation Committee, Michael Simmers.
2006–2007	CIS Hiring Committees, UWSP Department of Mathematical Sciences.
Fall 2006	Candidate Evaluation Committee, Susan Talarico.
Fall 2006	Candidate Evaluation Committee, Anthony Ellertson.
09/2001–present	Library/Audio Visual Committee, UWSP Department of Mathematical Sciences (chair 2001–present).
09/2001–05/2006	Coordinating Committee, UWSP Math/CIS Department (chair 2002–2003, 2005–2006).
08/2003–08/2004	Handbook Revision Committee, UWSP Math/CIS Department.
Fall 2003	Candidate Evaluation Committee, Jed Herman.
Fall 2002	Candidate Evaluation Committee, Margaret Olson.
Fall 2002	Math 209 Textbook Selection Committee (chair).
2001–2002	Search and Hiring Committee, UWSP Math/CIS Department.

4.2 College and University Level Service

09/2009–present	Faculty Senator.
10/2008–present	Co-Faculty Adviser, UWSP Wesley Society (Methodist student organization).
08/2003–present	UWSP Pathways to Point Leadership Committee.
08/2010	Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.
09/2008–2009	UWSP Sustainability Task Force Subcommittee on Climate Action/Climate Neutrality.
08/2008	Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.
08/2007	Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.

08/2007–12/2007   Faculty Leader, UWSP Semester Abroad in Munich, Germany.

08/2003–05/2007   University Technology Committee, UWSP.

09/2001–08/2006   Faculty Adviser, UWSP Swim Club (founded).

08/2006   Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.

08/2005   Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.

09/2001–05/2005   Faculty Adviser, INFORMS Student Chapter of UWSP (founded).

08/2004   Senior Trip Leader, Pathways to Point (UWSP freshman orientation) trip to the Namekagon/St. Croix rivers.

03/2003–09/2003   Ad-hoc Committee on Differential Tuition, UWSP.

10/2002–08/2003   Faculty Adviser, UWSP Chess Club.

4.3 Professional Service in the Community at Large

In addition to the items listed below, the research projects on assignment of students to elementary schools in Stevens Point may be considered as service to the community.

5/2009–present   Board of Directors and Treasurer, American Suzuki Foundation.

3/25/2009, 2/17/2010, 2/15/2011   Guest lecturer, "Optimization and linear programming," PJ Jacobs Junior High School math classes, Stevens Point, WI.

3/2008   Refereed a submission to the Journal of Computational and Applied Mathematics.

1/10/2008   Guest lecturer, "Voting methods with more than two candidates," Washington Service Learning Center 6th grade, Stevens Point, WI.

11/26–27/2007   Guest lecturer, Maria Theresia Gymnasium (12th grade) advanced mathematics class, Munich, Germany.

05/19/2005   Program Leader, "Secret Codes," Washington Elementary School PEP Day.

2000–present   Maintainer, test problem collection for stochastic linear programming.

Chapter 5

Awards and Honors

High Merit Awards, UWSP

Year	Peer	Dept. Chair's	Dean's	Vice Chancellor's
2000		✔		
2001	✔	✔	✔	✔
2002	✔		✔	✔
2003	(No high merit process performed for 2003)			
2004	✔	✔	✔	
2005	✔	✔	✔	✔
2006	✔	✔	✔	✔
2007		✔	✔	✔
2008	✔	✔		
2009	(No high merit process performed for 2009)			
2009-10	✔	✔		

Awards and Honors

4/1/2009	UWSP Student Employer of the Year for work with the Center for Athletic Scheduling
5/7/2006	Honorary inductee, Phi Eta Sigma National Honor Society
5/7/2006	Keynote speaker, UWSP Phi Eta Sigma initiation ceremony

Chapter 6

Vitae prior to joining UWSP

Awards and Honors

05/2000	Summer Graduate Research Assistantship, Washington State University
01/2000	Hacker Mathematics Scholarship for outstanding graduate students, awarded by the Department of Pure and Applied Mathematics, Washington State University
05/1997	Hacker Mathematics Scholarship for outstanding graduate students, awarded by the Department of Pure and Applied Mathematics, Washington State University

Teaching Experience

08/1995-05/2000	Washington State University, Graduate Assistant.
08/1994-05/1995	University of Idaho, Graduate Assistant.

Professional Experience

05/1995–05/1999   Pacific Simulation, Inc., Moscow, ID (summers only)

- Designed and programmed the engine for FactNet 4.0. This high end software uses factor analysis and partial least squares regression to stochastically model data for the pulp and paper industry.
- Designed and programmed IMAS DMC. This is a multi-input, multi-output model based dynamic matrix controller. It controls chemical processes in

the pulp and paper industry by optimizing the predicted outcome over a constrained continuous set of possible control moves.

08/1989–08/1994   Exxon Company, U.S.A., Baton Rouge Refinery

- Measurement Engineer
  Responsible for the accuracy of $10M/day of oil and gas transactions. Led team of measurement technicians and accounting personnel.

- Design Engineer
  Designed multi-million dollar processing units. Responsible for design safety, economy, and operability.

- Process Engineer
  Provided technical support for daily operations, and designed small ($< \$100,000$) projects for the Sulfur Plant.

Publications

A. J. Felt, "A computational evaluation of interior point cutting plane algorithms for stochastic programs," Ph.D. Thesis, Washington State University, August 2000.

Presentations and Conferences Attended

K. A. Ariyawansa and A. J. Felt (presenter), "Interior cutting plane algorithms for stochastic programming", INFORMS Meeting, Salt Lake City, UT, May 7–10, 2000 (invited).

K. A. Ariyawansa and A. J. Felt (presenter), "Parallel interior cutting plane algorithms for solving stochastic linear programming problems", University of Wisconsin-Stevens Point, March 3, 2000.

K. A. Ariyawansa and A. J. Felt (presenter), "Introduction to stochastic linear programming problems and parallel interior cutting plane algorithms for solving them", University of Wisconsin-La Crosse, February 28, 2000.

K. A. Ariyawansa and A. J. Felt (presenter), "A parallel implementation of interior cutting plane algorithms for stochastic programming", International Conference on Stochastic Optimization: Algorithms and Applications, Center for Applied Optimization, University of Florida, February 20–22, 2000 (invited).

K. A. Ariyawansa and A. J. Felt (presenter), "Computational evaluations of interior cutting plane algorithms for stochastic programming", Bradley University, February 14, 2000.

K. A. Ariyawansa and A. J. Felt (presenter), "Interior cutting plane algorithms for stochastic linear programming", University of Minnesota Morris, January 19, 2000.

Attended SIAM Conference on Optimization, Atlanta, GA, August, 1999.

A. J. Felt (presenter), "The mathematics of FactNet 4.0", Pacific Simulation, Inc., Moscow, ID, March 12, 1999 (invited).

A. J. Felt (presenter), "Two-stage stochastic linear programming problems", Annual Meeting of the MAA - Pacific Northwest Section, June 19, 1998.

A. J. Felt (presenter), "The mathematics behind FactNet", Pacific Simulation, Inc., Moscow, ID, June, 1998.

Service

09/1997–05/2000   Washington State University Mathematics Web Committee.

09/1997–05/2000   Washington State University Mathematics Computer Committee.

09/1998–01/1999   Hiring Committee for a faculty position in inverse problems, Department of Pure and Applied Mathematics, Washington State University.

Appendix A

The UWSP Center for Athletic Scheduling

The UWSP Center for Athletic Scheduling (CAS) is a group of UWSP students that provide a service to NCAA Division III and high school athletic conferences across the country. The CAS is financially self-supporting, generating enough revenue to pay the students a respectable wage, fund student travel to conferences and even provide scholarships.

The CAS got its start in Math 315: Operations Research II in the Spring Semester, 2006. I assigned that class a special project of creating *better* basketball schedules for the Wisconsin Intercollegiate Athletic Conference (WIAC) than could be created by the WIAC itself. Students interviewed the WIAC Commissioner, Dr. Gary Karner, and took two weeks of class to develop a mathematical model that reflected the properties the WIAC wanted in the schedule.

Using mathematical optimization, the class created men's and women's schedules for the 2007–2008 and 2008–2009 seasons. The WIAC already had created their own 2007–2008 schedules, so we were able to compare the class' schedules to those created by the WIAC by hand. We were able to improve on the WIAC schedules significantly. Dr. Karner suggested that we sell this service, and promptly sent our 2008–2009 schedules out to the coaches for preliminary approval. He said that, for the first time ever, he did not get a single complaint from the coaches during this step of the process.

With two students from that Math 315 class, I applied for and received $900 from the College of Letters and Science to start the CAS. Dr. Karner went to a conference of NCAA Division III athletic commissioners and stood up to personally testify for our service. He passed out CAS brochures, and

the clients began to call.

In appreciation for the help Dr. Karner has given us, the CAS provides free scheduling services for any requests from the WIAC. We now schedule nearly all WIAC sporting events.

In the years since, the CAS has grown to now employ six UWSP math majors: one Office Manager and five Modelers. In fiscal year 2009–2010, CAS student-employees presented at two national conferences. The CAS partially funded this travel. In addition, the CAS helped other UWSP math majors travel to attend two regional math conferences and provided two $500 scholarships to UWSP freshman and sophomore math majors. Revenue for FY2009–2010 was $3,325.

The CAS appreciates all the support we have received, including the initial CLS grant, office space, computers, software, and access to the department's fax and copy machines.

Appendix B

Selected Publications