

TO: Personnel Committees  
FROM: Ted Mims, Ph.D.  
Assistant Professor  
DATE: September 1995  
RE: Application for Tenure

**A. Introduction**

In accordance with the Collective Bargaining Agreement by and between the University and UPI, I am submitting my formal request for tenure at the University of Illinois at Springfield based on the following criteria:

- 1) I serve at the rank of Assistant Professor.
- 2) I serve as a full-time faculty member.
- 3) I will have served a probationary period of six years at the rank of Assistant Professor at the University of Illinois at Springfield.
- 4) I have demonstrated "excellence" in the area of teaching at the University of Illinois at Springfield; see the section on my teaching included in this document; see my personnel file for letters of support for tenure; see my supplemental file for additional information on teaching materials I have developed.
- 5) I have shown evidence of "superior performance" in scholarship and service to the University and community; see the sections on scholarship and service included in this document; see my personnel file and supplemental files for additional supportive information.

I retired from the Louisiana Educational System after twenty-three years of successful teaching. In August 1990, I was employed as an assistant professor of computer science at Sangamon State University.

Prior to coming to Springfield, my teaching experience included:

one year (1967 - 1968) of teaching college algebra as a graduate assistant at Northwestern State University,

ten years (1968 - 1978) of teaching mathematics at the secondary level in two different school systems,

nine years (1978 - 1987) of teaching computer science at Louisiana State University,

three years (1987 - 1990) of teaching computer science at Nichols State University,

six of the years at Louisiana State University included teaching computer science courses at Southern University as part of a desegregation plan between Southern and LSU, and

two summers of teaching courses on administrative uses of computers for elementary and secondary school administrators at Louisiana Tech University.

This list suggests the depth and diversity of my teaching experience even before I came to SSU, and teaching at SSU and UIS has given me the opportunity to enhance even further my teaching expertise in computer science. My duties the first year at SSU focused on teaching computer science courses. During my second year at SSU the computer science program was formed and the program members elected me program convener. Since that time my duties have focused on teaching at least two night courses each semester and administering the program. These duties did not, however, preclude my devoting a significant amount of time to scholarship and service.

The University has afforded me opportunities for professional growth, and these opportunities have proven all the more rewarding as I took full advantage of them. I developed and taught new courses, conducted scholarly research related to teaching and rendered service at the program, school, university and external levels. As part of my formal request for tenure, I will in the following sections delineate my contributions and accomplishments in the areas of teaching, scholarship and service, which remain for me a constant source of pride and encouragement.

## ***B. Teaching, Advising and Enhancing Teaching and Learning***

### **I. Teaching:**

Teachers prepare students to analyze ideas in a logical manner, synthesize diverse ideas into an integrated whole, assess the worth and relevance of the material, and convey ideas, feelings, and experiences through scholarly writing and discussion with others. Dedicated enactment of this process in over twenty-eight years of teaching has made me a successful teacher who developed instructional materials and a teaching style that engage the students' attention and help students learn.

To become a teacher I completed a B.S. in Mathematics and a M.S. in Math Education. In addition to these degrees, I completed over thirty graduate hours of courses in education. These courses included topics related to instructional methods, supervision and administration. After teaching high school mathematics I entered graduate school at Louisiana State University and earned a M.S. in Systems Science offered by the Computer Science Department. Following completion of my degree at LSU I earned a Ph.D. in College Teaching at the University of North Texas. The degree allowed me to take half of my graduate course work in Higher Education Administration and half in Computer Science. This plan of education prepared me for a career in teaching computer science and administration. In total I have completed 49 hours of mathematics, 54 hours of supervision and administration and 52 hours of computer science course work at the graduate level. The cumulative experience of twenty-eight years of teaching and over 150 college credit hours in three related disciplines have equipped me for excellence as a teacher, advisor and scholar.

My major contribution to the computer science program has been in the area of teaching. My teaching contribution has been two fold: First, I refined existing courses; and, second, I developed and taught completely new courses that broadened the appeal of the curriculum. The new courses were in parallel processing and networks. The first courses I taught at SSU included courses in operating systems and computer architecture. To enhance these courses I developed sample code and laboratory exercises that incorporated the theory from the lecture materials into hands-on programming projects. Students learned to implement such concepts as interrupts, memory mapped I/O, microcode, shared memory, semaphores and client/server in the programming projects for these courses.

During the spring semester of my first year at SSU, I developed a parallel processing course and offered it as an experimental course the next summer. This was the first time our students had been given the opportunity to write and execute parallel code on parallel processors. The course was well received and I developed a National Science Foundation grant which was subsequently funded to establish a parallel processing laboratory. The experimental course was successful and was converted into a formal course, CSC 484, Introduction to Parallel Processing. A major thrust of my effort has been to develop instructional laboratory modules for teaching parallel processing. These modules have been published and utilized by others teaching similar courses at other universities including, Clarke College, Gettysburg College, Illinois State University, St. Bonaventure University, St. John Fisher College, SUNY Oswego, Taylor University, and University of Michigan at Dearborn.

When I arrived at SSU we did not have a course on networks. There was a course on data communications being taught by a part-time faculty member. In the spring semester of my second year I developed an experimental course on Unix Network Programming, a course that has proven popular and that has been developed and subsequently offered as a graduate course, CSC 583 Network Programming. The enrollment for CSC 583 was thirty-one students for the fall semester 1995. This represents the largest enrollment in a 500 level computer science course offered by the program in the five years I have been teaching in the program. Prior to this, the largest number of students to be enrolled in a 500 level CSC course was eighteen in CSC 574 in the fall of 1994. I redesigned CSC 483 Introduction to Data Communications and offered it as an introductory course on networks. Further, I have developed laboratory programming projects that give the students hands-on experience incorporating the theory of networks into programs they write. These are exciting courses to teach, ones in which the students truly get involved in the programming projects. Proof of these courses' popularity and their success in eliciting student interest is shown in the high number of students who have chosen the topic for their master's project based on the material they studied in these courses.

A review of the program's computing facilities revealed there was not adequate equipment to provide students with the necessary laboratory experience appropriate for such courses. For that reason, I successfully developed a National Science Foundation proposal to establish an operating systems and networking laboratory for the program. I am proud to report that the proposal has been accepted: we now have the funds to establish the laboratory. I am currently in the process of purchasing equipment for the laboratory.

My teaching contributions to the computer science program were not limited to the design, development and teaching of new courses nor to the establishment of modern, fully equipped computing laboratories. It extended to urging to excellence the heart of any program, its students. Six undergraduate students have participated in research projects funded by the National Science Foundation and supervised by me. The students utilized information presented in the courses that I taught in their research projects. The results of four of the students' research projects have been published in conference proceedings. Two of the students are currently completing their projects and plan to publish the results of their research. Also, a former graduate student, Mike McGraw, developed a set of C++ routines based on sample code I provided in a class he took. The results of his work were published and presented at a conference.

My teaching contribution further encompasses diligent participation in professional development activities. Participating in these activities also ensures the appropriate credentials to write grant proposals that will be funded. Subsequently, I put into practice what I learned from professional development activities and incorporated new material into the curriculum and courses I teach.

During the summer of 1989, I was one of twelve professors from across the United States selected to attend an NSF-sponsored course entitled "Parallel Computing - A Course for Undergraduate Faculty" hosted by Colgate University. The length of the course was three weeks. The first two weeks consisted of lectures, a visit to the Northeast Parallel Processing Center at Syracuse University, hands-on experience programming in the parallel language OCCAM and management of the programs on a network of transputers. During the summers of

1991 and 1992, I participated in two other NSF-sponsored workshops on curriculum development for an undergraduate parallel processing course also hosted by Colgate. I developed instructional modules on parallel processing which were included in a set of curriculum materials distributed by the project administrators. In addition, in an effort to sustain professional currency, I completed a graduate course on advanced operating systems at Louisiana State University during the fall semester 1989. Professor Hoppe from LSU and I developed a set of concurrent programming problems and implemented them on a transputer. Our work was presented and published as part of the Special Interest Group in Computer Science Education (SIGCSE) Symposium in San Antonio. During the fall semester of 1990, I attended a short course on parallel processing offered by Argonne National Laboratories. The workshop gave the participants hands-on experience with a variety of parallel processing architectures. In January 1993, I returned to Argonne to participate in a one-week course on parallel processing which focused on the P4 tool set developed at Argonne Laboratories.

During the summer of 1992, I participated in an NSF sponsored two-week workshop entitled "Parallel Processing Using Cost-Effective Resources" and hosted by Illinois State University. I also served as a consultant for the workshop and made a presentation on using OCCAM to write programs for transputers at one of the sessions. During the summer of 1993, I participated in an NSF-sponsored curriculum development workshop on parallel processing hosted by Illinois State University. I also attended an NSF sponsored workshop on "Teaching of Computer Science Using Laboratories" sponsored by NSF and hosted by Clemson University.

During 1994, I developed laboratory modules and presented them at the Small College Computing Symposium and the Colgate Workshop on Parallel Processing. I also assisted as an instructor with NSF workshops on Parallel Processing and Networks at Illinois State and Michigan State.

In addition, during the spring of 1995, I served as a panel member on a panel discussion of the non-traditional student in computing at The Special Interest Group in Computer Science Education Symposium in Nashville. I also made a presentation related to the NSF ILI grant for a parallel processing laboratory for undergraduate students at The Quality Education for Minorities (QEM) Network Conference in Chicago.

Finally, to develop excellence in teaching through professional development, I have been making a concerted effort to keep current in the field of computer science. To gain insight into the latest trends, I have maintained memberships in several computer science professional organizations, participated in professional development courses, and attended national and regional conferences. The information and expertise gained from these professional activities considerably enhanced the teaching strategies as well as the content of the classes I teach.

Designing and teaching new courses, creating and subsequently upgrading our computer science laboratories, urging our students to excellence by encouraging and facilitating their participation in nationally funded research projects, diligent and significant participation in professional development activities, successful grant applications, conducting workshops at other universities, membership in professional organizations, and copious publications of articles on teaching

scholarship: these are the ways in which I enacted my commitment to excellence in teaching and scholarship.

#### Course Evaluations:

From the fall of 1990 through the summer of 1995, I have taught twenty-nine four-credit-hour courses. Student evaluations of my courses have generally been positive and often gratifying.

Year	Courses Taught
1990	MSY 375 Advanced Pascal MSY 376 Computer Organization MSY 574 Operating Systems
1991	MSY 474 Systems Programming and Operating Systems MSY 476 Microprocessor and Computer Architecture MSY 470 Parallel Computing MSY 376 Computer Organization MSY 574 Advanced Operating Systems
1992	MSY 474 Systems Programming and Operating Systems MSY 476 Microprocessor and Computer Architecture MSY 470 Networking With Unix MSY 570 Advanced Networking With Unix CSC 376 Computer Organization MSY 574 Advanced Operating Systems
1993	CSC 474A Systems Programming and Operating Systems CSC 474B Systems Programming and Operating Systems CSC 491 Introduction to Parallel Processing CSC 470 Networking With Unix MSY 570 Advanced Networking With Unix CSC 376 Computer Organization CSC 574 Advanced Operating Systems
1994	CSC 474 Systems Programming and Operating Systems CSC 476 Microprocessor and Computer Architecture CSC 484 Introduction to Parallel Processing CSC 376 Computer Organization CSC 574 Advanced Operating Systems
1995	CSC 483 Introduction to Computer Networks CSC 484 Introduction to Parallel Processing CSC 476 Microprocessor and Computer Architecture

I have listed the summary data from student responses to the question "How do you rate the quality of this person as a teacher?." A listing of the data for each section I taught is included in Appendix A.

Response	Excellent		Good		Poor
Value	5	4	3	2	1
Students Responding	190	177	93	26	2
	38.9%	36.3%	19.1%	5.30	0.4%
Mean Ted Mims	4.1				
Mean SSU/UIS Faculty	4.1				

In their evaluations of my courses, more than 75% of my students place me in the top two categories of "excellent" and "excellent/good". For a required foundational course, CSC 376, Computer Organization, the ratings (for the fall of 1991) are positive: excellent 4, excellent/good 4, good 5 and good/poor 3. Students evaluating CSC/MSY 476, Introduction to Microprocessors and Computer Architecture, gave ratings in the "excellent" and "excellent/good" categories totaling 81.8%, 76.2% and 100.0%. CSC 476, a follow-up course to CSC 376, is an elective. Acting on suggestions from former and current students on ways to improve this course, I made changes in the courses by spending more time on the hands-on exercises; as a result, subsequent student evaluations of CSC 376 during the fall semesters of 1993 and 1994 improved. The percentages of the ratings "excellent" and "excellent/good" in the courses on operating systems, parallel processing and networking with Unix generally remained in the high bracket of the 75% to 100% range. Finally, I noticed that while remaining generally high, the evaluations for required courses tended to be lower than those for elective courses.

Since my appointment in the fall of 1990 through the summer of 1995, I have taught twenty-nine sections of courses, with a total of 244 undergraduate and 244 graduate students evaluating my courses. 72.7% took the courses as required courses and 27.3% took the courses as electives. The material in the courses I have taught focuses on hardware and operating system software. This has proven a most challenging subject for most computer scientists and computer users. Even though 72.7% of the students taking my courses took them as a requirement my evaluations are very positive. 71.4% of the students indicated that their interest in the subject increased as a result of taking the courses. This rating is high in light of the fact that the courses were required for most students and that for many of them employment in an area related to hardware and operating systems is not a career goal. 84.2% indicated they increased their skills in critical thinking. The response to this question is difficult to interpret, since, presumably, the critical thinking skills of most upper division computer science majors would already be at a high level. It seems that 84.2% is a high rating in a discipline like computer science. 92% indicated my presentations were well planned and organized. This is a high rating and indicates the students appreciate the work I have done in developing lessons and sample code to demonstrate the various programming paradigms. 79.8% of the students gave me ratings in the top two categories for being competent in the content of the material offered. 76.3% indicated they were motivated to work at their highest level. This percentage seems to be high based on the fact that 73.3% of the students were taking the courses as a requirement. I am particularly proud of the fact in evaluating the quality of my teaching, 75.2% of my students assessed my teaching as either "excellent" or "excellent/good". On a scale of 1 - 5, the mean rating for the student's evaluations of the quality of my teaching is 4.1. These student evaluations are a positive indicator of my teaching.

- II. Advising:
- \* Advising CSC and MSC Students (155 students as of 8/1/95)
  - \* Evaluating of transcripts for majors
  - \* Serving as Director of Master's Projects (see Appendix B)
  - \* Serving on Master's Projects Committees (see Appendix C)
  - \* Serving on AST Projects (see Appendix D)
  - \* Writing letters of recommendation for students
  - \* Supervising six undergraduate research projects (see Appendix E)
  - \* Editing student papers for publication (see Appendix F)
- III. Enhancing Teaching and Learning:
- \* Developed Instructional Modules for teaching Networks
  - \* Developed Instructional Modules for teaching Parallel Processing
  - \* Made presentations at Michigan State University on teaching an undergraduate networks course
  - \* Made presentations at Michigan State University on teaching parallel processing
  - \* Served on a panel discussion related to teaching nontraditional students at a national conference
  - \* Made numerous presentations at conferences on topics relevant to teaching undergraduate computer science

### **C. Research, Scholarship and Creative Contributions**

My research, scholarship and creative contributions began with the research I conducted for my Ph.D. dissertation. I developed a set of computing competencies that were evaluated and ranked by a group of professionals in computer science education from across the nation. The results of this study were published by educational computing and administrative journals and were anthologized in one book. In addition to the publications related to the competencies, I authored and co-authored several articles related to the role of school administrators in implementing computing into the elementary and secondary school curriculum.

In 1987, I began teaching upper-division courses in computer architecture at Nichols State and began writing papers related to teaching computer science. I was the principal author of a published paper on an internship course and supervised my first undergraduate research project at Nichols State.

In 1989, I completed a post-doctoral graduate course in operating systems at LSU. As a result of the research I did in the course and an NSF workshop I attended at Colgate I coauthored a paper about parallel processing. The paper "Utilizing A Transputer Laboratory And Occam2 In An Undergraduate Operating Systems Course," of which I am the principal co-author, has been referred to by other scholars in their writings on the subject. These references suggest that my peers regard this paper as a piece of significant scholarship in the field. After publishing the first paper about parallel processing I have had several other papers published and been invited to



make presentations at conferences and workshops. My research focuses on developing teaching modules and laboratories for teaching parallel processing, operating systems and networks.

A good indication of the quality of my teaching and research is reflected in the number of invitations extended to me to participate in NSF and Argonne National Laboratories workshops. Also, a major criterion for awarding NSF ILI grants is the qualifications and ability of the principal investigator to successfully implement the grant. As part of my scholarly activity I have received two of these grants.

I am pleased with my record of accomplishment in Research, Scholarship and Creative Contributions. Sangamon State and the University of Illinois at Springfield have been an excellent environment for conducting research and scholarly activity related to teaching. My record of accomplishment in publications and grants has brought national recognition to the University. It allows me to repay, however modestly, the University for the interest and confidence it showed in my scholarship. The description of my scholarly activities listed below details the extent of my professional development and the high degree of my commitment to it.

#### I. Publications and Conference Presentations:

1. T. Mims, et al., Panel Discussion, "Introducing Parallel Processing into the Undergraduate and High School Curriculum," The National Educational Computing Conference, Baltimore, MD, June 1995.
2. M. McGraw and T. Mims, "Utilizing an Object-Oriented Language to Implement Semaphores and Shared Memory," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.
3. D. Thayer and T. Mims, "Building Access Webs," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.
4. P. Wallace and T. Mims, "Parallel Processing of an Existing FORTRAN Application in a Supercomputing Environment," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.
5. T. Mims, et al., Panel Discussion, "The Non-Traditional Student in Computing: Characteristics, Needs and Experiences," The Twenty-Sixth SIGCSE Technical Symposium On Computer Science Education, Nashville, Tennessee, March, 1995.
6. T. Mims, "A Parallel Processing Laboratory Designed for Use by Non-Traditional Undergraduate Students," The Quality Education for Minorities EM Network Conference, Chicago, IL, March 1995.
7. T. Mims, S. Castaneda, and C. Torsonne, "Message Passing and Numerical Computation Laboratory Assignments Utilizing Portable Programs for Parallel Processing (P4)," The Parallel Computing For Undergraduates, National Science Foundation Symposium, Colgate University, Hamilton, New York, June 1994.

8. T. Mims and S. Castaneda, "Parallel Processing Laboratory Assignments Utilizing Portable Programs for Parallel Processing (P4)," The Twenty-Seventh Annual Small College Computing Symposium, Winona, Minnesota, April 1994.
9. T. Mims, "A Model Concurrent Programming Project for Implementation on Shared Memory and Message-Passing Architectures," The Twenty-Seventh Annual Small College Computing Symposium, Winona, Minnesota, April 1994.
10. T. Mims, "Research Experiences for Undergraduates," The Eighth Annual Midwest Computer Conference, Normal, Illinois, March 1994.
11. T. Mims, "Utilizing Transputers and OCCAM2 to Introduce Message-Passing Communication Between Processes," The Seventh Annual Midwest Computer Conference, Whitewater, Wisconsin, March 1993.
12. T. Mims, (Chair), S. Castaneda, D. Sanders, and C. Torsonne, Panel Discussion, "Parallel Processing Panel," The Seven Annual Midwest Computer Conference, Whitewater, Wisconsin, March 1993.
13. T. Mims, et al., Panel Discussion, "Workshop Experiences for Teaching Undergraduate Computer Networking," The Twenty-Fourth SIGCSE Technical Symposium on Computer Science Education, Indianapolis, Indiana, February 1993.
14. T. Mims, "Transputers and OCCAM2: An Economical Solution to Parallel Computing," The Fifteenth Annual Meeting of the Southeastern Atlantic Section of the Society For Industrial and Applied Mathematics, Western Carolina University, Cullowhee, North Carolina, April 1991.
15. T. Mims, and A. Hoppe, "Utilizing A Transputer Laboratory And Occam2 in an Undergraduate Operating Systems Course," The 1991 SIGCSE Technical Symposium On Computer Science Education, San Antonio, Texas, March 1991.
16. T. Mims, "Utilizing Microprocessor Experiments Effectively in an Undergraduate Computer Organization Course," The Twenty-First Annual Pittsburgh Conference on Modeling and Simulation, University of Pittsburgh, May 1990.
17. T. Mims and Michael Jones, "Using A Microcode Simulator As an Instructional Tool," The National Educational Computing Conference, Boston, Massachusetts, June 1989.
18. T. Mims, R. Folsie, and A. Martin, "Planning and Implementing an Internship Program For Undergraduate Computer Science Students," The Nineteenth SIGCSE Technical Symposium On Computer Science Education, Atlanta, Georgia, February 1988.
19. T. Mims, et al., Panel Discussion, "Teaching Upper-Level Courses in Operating Systems and Computer Architecture," The 1987 South Central Regional ACM Conference, Lafayette, Louisiana, November 1987.

20. T. Mims, "Identifying Administrative Tasks To Which Artificial Intelligence Can Be Applied," The Fourth Annual International Conference on Technology and Education, Fort Worth, Texas, April 1987.
21. T. Mims, "Using Artificial Intelligence in an Expert Student-Scheduling System," The Fourth International Symposium on Modeling And Simulation Methodology, Tucson, Arizona, January, 1987.
22. T. Mims, Chairman, Panel Discussion, "Policy and Guidelines For the School Administrator To Follow When Implementing Computers And Computing Into The Curriculum," The National Educational Computing Conference, San Diego, California, June 1986.
23. T. Mims, et al., "Microcomputers in School Management: A Graduate Course Designed For and By School Administrators," The Association for Educational Data Systems Annual Conference, New Orleans, Louisiana, April 1986.
24. T. Mims, et al., "Using Computers Successfully in School Administration," The Association for Educational Data Systems Annual Conference, New Orleans, Louisiana, April 1986.
25. T. Mims and R. McGee, "An Overview of Computerized Student Scheduling," Special Interest Group Bulletin: International Council for Computers in Education, Eugene, Oregon, Oct./Nov./ Dec., 1985.
26. T. Mims, "The Administrator's Role in the Implementation of Computers in the Schools," The Louisiana Association of Computer Using Educators Fall Conference, Alexandria, Louisiana, November 1985.
27. T. Mims, "Attendance Using PFS: File," The Louisiana Association of Computer-Using Educators, Fall Conference, Alexandria, Louisiana, November 1985.
28. T. Mims and D. Kingery, "Using Computers To Improve the Administration of Elementary and Secondary Schools," The Fifth Annual Texas Conference on Technology & Education, Austin, Texas, June 1985.
29. T. Mims, Chairman, Panel Discussion, "The Role of the School Administrator in Implementing Computer Science Courses into the Curriculum," The World Conference on Computers in Education, Norfolk, Virginia, August 1985.
30. T. Mims, Chairman, Panel Discussion, "Using Computers to Improve the Administration of Elementary and Secondary Schools," The World Conference on Computers in Education, Norfolk, Virginia, August 1985.
31. T. Mims and D. Kingery, "Computer Competencies for School Administrators: Implications for the Current and the Future," The Eighth Western Educational Computing Conference, San Diego, California, November 1984.

32. T. Mims and D. Kingery, "Personnel Problems in Educational Computing," American Association of School Administrators Journal, Arlington, Virginia, October 1984.
33. T. Mims, "Computer Competencies for School Administrators," American Association of School Administrators Journal, Technology Issue, Arlington, Virginia, April 1984.
34. T. Mims and J. Poirot, "Computer Competencies for School Administrators," The Computing Teacher, Eugene, Oregon, February 1984.
35. T. Mims, "Computer Competencies for School Administrators," The Mid-South Association for Educational Data Systems, Eleventh Annual Conference, New Orleans, Louisiana, February, 1984.
36. T. Mims and J. Poirot, "Computer Competencies For School Administrators," Special Interest Group Bulletin: International Council for Computers in Education, Eugene, Oregon, January, 1984.
37. T. Mims, "Topics and Programs for Elementary and Secondary School Administrators," The National Educational Computing Conference, Kansas City, Missouri, June, 1982.
38. T. Mims, and H. Taylor, "A Computer Literacy Course for Louisiana Teachers," The Mid-South Association for Educational Data Systems, Ninth Annual Conference, New Orleans, Louisiana, February, 1982.
39. T. Mims, "Microcomputer Applications for Administration and Management," The Computers in Education Conference, Biloxi, Mississippi, October, 1981.
40. T. Mims, "School Scheduling Systems," The National Education Computing Conference, Denton, Texas, June, 1981.

## II. Masters Projects Supervised:

(I am not listing all of the projects I have supervised. I am limiting this list to those master's projects that are relevant to Parallel Processing and Networking. For the complete list please consult Appendix C.)

1. Sheary, Kathryn, "Parallel Processing at the High School Level," Summer 1995.
2. Kim, Byoung, "Implementing Voice Transmission on a Network of Silicon Graphics Work Stations," Summer 1995.
3. Esmailzadegan, Peyman, "DATANET: An Implementation and Interrelation of Data on a LAN," Summer 1995.
4. Choudry, Ashish, "Implementing a Parallel Algorithm for Computing Areas of Geometrical Shapes," Summer 1994.

5. Clausen, Randelle, "A Study and Comparison of Sequential and Parallel Implementations Specific to the Odd and Even Transposition Sort and Pipeline Sort," Summer 1994.
6. Usman, Tariq, "A Comparison Study of the OSI Model and a Prevalent LAN Model in the Client Server Arena," Spring 1994.
7. Hu, Bo, "A Study of the Unix Process Structure and Its Management," Spring 1994.
8. Al-Rayes, Walid, "Implementing Simplex Method on Parallel Algorithms Using Distributed Computer System," Fall 1993.
9. Alton, Marilyn, "A Study and Comparison of Sorting Algorithms Implemented on Sequential and Parallel Architectures," Summer 1993.
10. Hasan, Shabih, "The Study of Graph Algorithms Using Parallel Processing in OCCAM Language," Spring 1993.
11. Fromm, Jim, "Implementing Parallel Algorithms on a Distributed Computing System," Spring, 1993.
12. Shang, Xiao, "A Study of the Socket Mechanism for Interprocess Communication," Fall, 1992.
13. Shih, Yu-Hsun, "The Application of TCP/IP in Unix Networking," Summer, 1992.
14. Tran, Nicolas, "Client-Server and Peer Models for Interprocess Communication," Summer, 1992.
15. Unni, Rajagopalan, "A Study of Parallel Processing Using Concurrent Programming Constructs Implemented on a Message Passing Architecture," Fall, 1991.

### III. Other Scholarly Activities:

I was

1. One of four participants from a 1992 workshop invited to assist with a curriculum development workshop on Computer Networks for Undergraduate Teaching Faculty sponsored by NSF and hosted by Michigan State University, Summer 1994.
2. Selected as a participant in a parallel computing curriculum development workshop sponsored by NSF and hosted by Colgate University, Summer 1994.
3. Served as a panel member and moderator to review proposals for the National Science Foundation Young Scholars Program, July 1993.

4. Selected as a participant in a faculty-enhancement workshop entitled "Teaching of Computer Science Using Laboratories" sponsored by NSF and hosted by Clemson University, Summer 1993.
5. Selected as a participant in a parallel computing curriculum development workshop sponsored by NSF and hosted by Illinois State University, Summer 1993.
6. Selected as a participant in a parallel computing course sponsored by the Department of Energy and Argonne National Laboratories, January, 1993.
7. Selected as a participant and guest lecturer for a parallel computing course "Parallel Processing Using Cost-effective Resources" sponsored by NSF and hosted by Illinois State University, Summer 1992.
8. Selected as a participant in a curriculum development workshop on Computer Networks for Undergraduate Teaching Faculty sponsored by NSF and hosted by Michigan State University, Summer 1992.
9. Selected as a participant in a parallel computing curriculum development workshop sponsored by NSF and hosted by Colgate University, Summer 1992.
10. Served as a panel member to review proposals for the National Science Foundation Young Scholars Program, October 1991.
11. Selected as a participant in a parallel computing curriculum development workshop sponsored by NSF and hosted by Colgate University, Summer 1991.
12. Selected as a participant in a three-week workshop on Computer Networks for Undergraduate Teaching Faculty sponsored by NSF and hosted by Michigan State University, Summer 1991.
13. Served as an outside examiner for the Knox College Honors Program, Knox College, Galesburg, Illinois, May 1991.
14. Selected as a participant in a parallel computing workshop sponsored by Argonne National Laboratories, October 1990.
15. Selected as a participant in a parallel computing course sponsored by NSF and hosted by Colgate University, Summer 1989.

#### IV. Grants and Stipends:

I was

1. Recipient of National Science Foundation stipend to make a presentation at an undergraduate faculty-enhancement workshop on Parallel Processing at Illinois State University, June 1995.

2. Co-principal investigator and recipient of National Science Foundation Grant entitled "Research Experiences for Undergraduates" \$9,400, June 1995.
3. Co-principal investigator and recipient of National Science Foundation Instrumentation and Laboratory Improvement Grant entitled "Undergraduate Networks and Operating Systems Laboratory," \$26,991, April 1995.
4. Recipient of National Science Foundation stipend to attend and assist with an undergraduate faculty-enhancement workshop on networks at Michigan State University, August 1994.
5. Recipient of National Science Foundation stipend to make a presentation at an undergraduate faculty-enhancement workshop on Parallel Processing at Illinois State University, June 1994.
6. Co-principal investigator and recipient of National Science Foundation Grant entitled "Research Experiences for Undergraduates" \$9,400, May 1994.
7. Principal investigator and recipient of National Science Foundation Instrumentation and Laboratory Improvement Grant entitled "A Parallel Processing Laboratory Designed for Use by Non-Traditional Undergraduate Students" \$24,864, July 1993.
8. Co-principal investigator and recipient of National Science Foundation Grant entitled "Research Experiences for Undergraduates" \$9,300, May 1993.
9. Recipient of a National Science Foundation Grant to purchase software for use in teaching a course on networking \$1,000, November 1992.
10. Recipient of National Science Foundation stipend for developing curriculum modules for parallel processing at Colgate University, July 1991 and 1992.
11. Recipient of National Science Foundation stipend to attend an undergraduate faculty-enhancement workshop on networks at Michigan State University, Summers 1991 and 1992.

#### **D. Service**

I am very pleased with my record of service at the program, school, university and external levels. Active participation in service and governance has been a rewarding and productive part of my teaching career. The description of my service activities listed below demonstrates that I have been diligent in program service, university service and national service.

##### **I. Program Service:**

Fall 1990 - Present: As part of my service to the program I regularly participated in program committee meetings, recruited students, coordinated visits by guest lecturers, and developed new courses, curriculum materials and grant proposals. Other program-related service included

working on our seven-year program review, coordinating the assessment plan and chairing the faculty recruitment committee in 1992-93.

1991 - Present: Serving as convener of the Computer Science Program performing such functions as evaluating student transcripts, meeting with potential students, chairing program meetings, coordinating catalog changes, preparing program documents, preparing schedule documents, writing letters, representing the program at related activities, preparing purchase orders and other program-related activities.

Fall 1993 - Present: Serving as faculty advisor to the Computer Science Club.

Summer 1989 - Summer 1995: Attended NSF-sponsored workshops related to undergraduate teaching at Clemson, Colgate, Illinois State and Michigan State and used the curricular guidelines from the workshops to develop three new courses in parallel processing and networks.

Fall 1994 - Spring 1995: Redesigned the undergraduate networks course which was previously taught by a part-time faculty member and adopted a new textbook with software for the course.

Fall 1994 - Spring 1995: Contacted state agencies and acquired over thirty PCs before they were sent to state surplus. These machines are being used by faculty in their offices and by students in a laboratory.

Fall 1993 - Present: Coordinated the efforts to develop the assessment plan for computer science majors.

Fall 1993 - Spring 1994: Significantly contributed to the discussions about modifying the program's graduate project proposal guidelines, and compiled materials for our own graduate project guidelines from the University of North Texas which proved useful to Dr. Grissom in coordinating the development of the new guidelines.

Spring 1993 - Spring 1995: Coordinated and completed the joint efforts with Lincoln Land to develop a Two-Plus-Two Plan for computer science majors.

Summer 1993, Summer 1994, Summer 1995: Successfully developed each of these summers grant proposals to participate in the

Research Experiences for Undergraduates sponsored by the National Science Foundation. These proposals have been funded and provided \$28,100 external funding for student stipends and administrative support.

Spring 1992: Attended a training session offered by the Computing Sciences Accreditation Board and used the skills gained toward improving the computer science curriculum offerings.

Fall 1991 - Spring 1992: Coordinated efforts that resulted in the acquisition of three copies of Mac-X software donated to the Mathematical Sciences and Computer Science Programs by Apple Computer Inc.



Spring 1991: Developed and subsequently taught a special topic course on parallel processing.

Spring 1991: Developed a PAC course on computers and society which was offered during the fall semester 1991.

1990 - 1991: Served as Chair of the Mathematical Sciences Recruitment Committee.

Spring 1991: Coordinated the program review conducted by Dr. John Gorgone.

Summer 1991: Used an NIA to conduct a study to determine the computing needs for supporting the program, and gained an NSF funded ILI grant resulting from implementing the findings of my NIA study.

Spring 1991 - Summer 1995: Coordinated the visits of guest lecturers on campus. The lecturers included: Dr. Marilyn Livingston from Southern Illinois University Edwardsville, Dr. Rick Miles from Micromedical Technologies, Mr. Robert Moore from Robert Moore & Associates, Dr. Robert Aiken from Temple University, Dr. Barry Mears from Dickey-john and Dr. Robert Panoff from the National Center for Supercomputer Applications.

Fall 1991 - Present: Coordinated equipment purchases for the computer science laboratories and faculty offices.

Fall 1991 - Present: Developed two National Science Foundation Instrumentation and Laboratory Improvement grant proposals that were funded and are providing \$51,855 of external and \$51,855 internal funding for laboratory equipment for the computer science program.

## II. University Service:

Spring 1995 - Summer 1995: Coordinated the installation of network boards in the state surplus computers and placed the computers in faculty offices after they were allocated for placement by the academic computing subcommittee charged with that responsibility.

1994 - 1995: Served on the School of Liberal Arts and Sciences Personnel Committee.

Fall 1994 - Present: Serving as the University's Faculty Athletics Representative. Duties related to this appointment include certifying student athletes for eligibility to participate in NAIA sports.

1994 - Present: Serving as a Faculty Senator elected at large.

Summer 1994: Served on the search committee for hiring a women's basketball coach.

Fall 1991 - Spring 1993: Served as a member of the university's Intercollegiate Athletics & Recreation Committee and developed a plan for waiving out-of-state tuition for athletes that have completed their eligibility and are returning to complete their degrees.

1990 - 1992: Served on the Women's Studies Program Committee.

Fall 1991 - Spring 1992: Served on the Student Senate's task force to study the feasibility of increasing the number of organized sports at SSU and chaired the task force's Academic Committee and served as a member of its Finance Committee. Reported to the Faculty Senate Steering Committee on the task force's work.

Fall 1991: Coordinated the efforts that resulted in the purchase of three Silicon Graphics workstations for the Health Sciences Building.

Summer 1991: Served on the environmental scanning group focusing on economic/technical areas and contributed to the development and presentation of a formal report.

Spring 1991: Participated in the university meetings exploring the future direction of the university.

Fall 1990 - Present: Served as a member on the Academic Affairs Computer Advisory Committee and gathered relevant documents and data on policy development.

Fall 1991 and Fall 1992: Served as a food service volunteer at the SSU Fall Festival.

### III. Community Service:

Fall 1994: Participated in the community outreach program sponsored by the Computer Science Program.

Fall 1994: Selected by the Ball-Chatham Community Unit School District Five Board of Education to serve as a consultant to the Illinois Association of School Boards on selecting a superintendent for the school district.

July 1991: Delivered a presentation on transputers and parallel programming to the local UNIX users group.

Fall 1991 - Present: Worked with several local companies to help them to recruit students for full and part-time computing positions.

Fall 1991 - Present: Consulted with and gave advise to several of the agencies in which the AST and GPSI students were working.

### IV. National Service

Summer 1995 - Spring 1997: Serving as Program Chair for The Midwest Computer Conference to be hosted by UIS in the spring of 1997.

Spring 1995 - Present: Serving on The Illinois State-wide Mathematics, Science, and Engineering Steering Committee for The Technical Assistance Project for Quality Education for Minorities Network.

Spring 1995 - Present: Reviewer of NSF proposals for the The Technical Assistance Project for Quality Education for Minorities Network.

Summer 1995: Served as Presiders Coordinator and a member of the Program Steering Committee assisting Keith Miller in coordinating session presiders for the 1995 National Educational Computing Conference.

Fall 1994: Reviewer for the IEEE Parallel & Distributed Technology Journal.

Summer 1994: Reviewed a proposed parallel processing textbook for Richard D. Irwin, Inc.

1991 - Present: Reviewer for the annual National Educational Computing Conference.

Fall 1991 - Present: Reviewer for the Association for Computing Machinery's Special Interest Group for Computer Science Education symposium.

Fall 1993: Reviewer for the IEEE Transactions on Education.

July 1993: Served as an evaluation panel member and session moderator for the National Science Foundation's Young Scholars Program.

Summer 1992: Reviewed, and made recommendations for, the draft version of "The Computing Sciences Curricula Guidelines" for two year colleges which was being developed for the ACM.

### **E. Summary**

Thanks to the reader for analyzing this report, my personnel file, and the supplemental file. I appreciate you taking the time out of your busy schedule to evaluate my application for tenure at the University of Illinois at Springfield.

Analysis of my teaching evaluations and efforts to incorporate new materials and courses into the curriculum reveals my interest in and dedication to teaching. My student evaluations are positive with a mean of 4.1 for the overall quality of teaching. This rating is equal to the mean for the UIS faculty. Of those students evaluating my courses, 92% of them indicated my presentations were well planned and organized. Because a majority of the students taking my courses take them as required courses and most of the students do not view the materials on computer architecture and operating systems as being relevant to their career plans, I am especially pleased with their evaluations.

I appreciate my students, colleagues, and administrators for recognizing my efforts both inside and outside the classroom. Being selected to attend and make presentations at the National Science Foundation workshops and being asked to review papers and proposals for national organizations and publications has been rewarding. Having the opportunity to exchange ideas with other colleagues at a national level and to keep abreast of the innovations in a rapidly evolving field has enabled me to share what we are doing in computer science at UIS with others and to obtain new ideas and materials to share with our students. I have found particularly heartening the numerous notes and letters of support I received. I was especially pleased to be nominated to Who's Who Among America's Teachers by Maria Joseph, one of our graduates and an honor student. It is with pleasure and professional pride that I accept this recognition from students, colleagues, and administrators who have supported my efforts.

My accomplishments in service and scholarship have significantly contributed to improving the quality of the education our computer science students receive. Participating in workshops, presenting at workshops and conferences, reviewing papers and books, serving on National Science Foundation panels, and writing grants is essential to help improve the quality of computer science education. Granted, service and scholarship related work is time consuming, but its importance to the advancement of the University makes the time well worth spending. The University provided an excellent environment not only for teaching but also for research and scholarship conducive to the improvement of teaching. Through my love and concern for teaching, scholarship and service, I am pleased to have been able to contribute to the professional, academic, and intellectual welfare of my students, the university and community. I look forward to further opportunities for teaching, service and research in a dynamic, growing university that honors the commitment of its faculty to excellence in teaching and scholarship.

## Appendix A

Responses to Question #10 on Student Evaluations  
How do you rate the quality of this person as a teacher?.

Response	Excellent	Good	Poor			
Value	5	4	3	2	1	
Fall	90 MSY 375	5	4	7	0	1
	MSY 376	7	6	2	1	0
	MSY 574	1	5	2	0	0
Spring	91 MSY 474	8	6	8	1	0
	MSY 476	7	2	2	0	0
Summer	91 MSY 470	6	5	1	1	0
Fall	91 MSY 574	3	6	2	1	0
	MSY 376	11	5	9	2	0
Spring	92 MSY 474	15	19	5	3	0
	MSY 476	9	9	4	1	0
Summer	92 MSY 470	5	2	0	0	0
	MSY 570	6	5	1	0	0
Fall	92 MSY 574	6	4	1	0	0
	CSC 376	4	4	5	3	0
Spring	93 CSC 491	10	9	3	0	0
	CSC 474A	5	7	3	3	0
	CSC 474B	2	4	1	0	0
Summer	93 CSC 470	5	6	3	1	0
	MSY 570	4	9	1	0	0
Fall	93 CSC 376	7	11	4	0	0
	CSC 574	4	2	2	2	0
Spring	94 CSC 474	7	4	7	4	0
	CSC 476	7	3	0	0	0
Summer	94 CSC 484	6	7	2	2	1
Fall	94 CSC 376	5	11	8	1	0
	CSC 574	6	8	4	0	0
Spring	95 CSC 483	17	8	2	0	0
	CSC 484	5	4	1	0	0
Summer	95 CSC 476	7	2	3	0	0
-----						
Total	190	177	93	26	2	
	38.9%	36.3%	19.1%	5.3%	0.4	
Mean Ted Mims		4.1				
Mean SSU/UIS Faculty		4.1				

## Appendix B

### Masters Projects Supervised

Walid A1-Rayes

"Implementing Simplex Method on Parallel Algorithms Using Distributed Computer Systems"

Ted Mims - Project Supervisor

Keith Miller - Student Choice

Gary Trammell- Dean Representative

Mohammed Alsaeed

"Implementing a Peer-to-Peer Local Area Network with Lantastic"

Ted Mims - Project Supervisor

Keith Miller - Student Choice

Ann Larson - Dean Representative

Marilyn Alton

"A Study and Comparison of Sorting Algorithms Implemented on Sequential and Parallel Architectures"

Ted Mims - Project Supervisor

Scott Grissom - Student Choice

William Martz - Dean Representative

Ashish Pal Choudry

"Implementing a Parallel Algorithm For Computing Areas of Geometrical Shapes"

Ted Mims - Project Supervisor

Scott Grissom - Student Choice

Gary Trammell - Dean Representative

Randelle Clausen

"A Study and Comparison of Sequential and Parallel Implementations Specific to the Odd and Even Transposition Sort and Pipeline Sort"

Ted Mims - Project Supervisor

Keith Miller - Student Choice

William Martz - Dean Representative

Peyman Esmailzadegan

"DATANET: An Implementation and Interrelation of Data on a LAN (Local Area Network)"

Ted Mims - Project Supervisor

Scott Grissom - Student Choice

Nada Chang - Dean Representative

Jim Fromm

"Implementing Parallel Algorithms on a Distributed Computer System"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

William Martz - Dean Representative

Shabih Hasan

"The Study of Graph Algorithms Using Parallel Processing In Occam Language"

Ted Mims - Project Supervisor

Richard Brewer - Student Choice

Hank Nicholson - Dean Representative

Bo Hu

"A Study of Unix Process Structure and Its Management"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

Chung-Hsien Sung - Dean Representative

Weiwen Jiang

"A Study of Shell Programming Implemented on Unix System Administration"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

Chung-Hsien Sung - Dean Representative

Byoung Oh Kim

"Implementing Voice Transission On A Network of Silicon Graphics Work Stations"

Ted Mims - Project Supervisor

Keith Miller - Student Choice

James Duvall - Dean Representative

Paul Poulsen

"A Study and Implementation Plan of the Interactive Graphics Needs for the Illinois Department of Nuclear  
Safety Office of Nuclear Facility Service"

Ted Mims - Project Supervisor

Richard Brewer - Student Choice

Norman Hinton - Dean Representative

Xiao-Jun Shang

"A Study of Socket Mechanism For Interprocess Communication"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

Malcolm P. Levin - Dean Representative

Kathryn A. Sheary

"Parallel Processing at the High School Level"

Ted Mims - Project Supervisor

Keith Miller - Student Choice

Larry Stonecipher - Dean Representative

Yu-Hsun Shih

"The Application of TCP/IP in Unix Networking"

Ted Mims - Project Supervisor

Richard Brewer - Student Choice

William Martz - Dean Representative

Nicolas Tran

"Client-Server and Peer Models for Interprocess Communication"

Ted Mims - Project Supervisor

Richard Brewer - Student Choice

Gary Trammell - Dean Representative

Rajagopalan Unni

"A Study of Parallel Processing Using Concurrent Programming Constructs Implemented on a Message Passing Architecture"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

Ann Larson - Dean Representative

Tariq Usman

"A Comparison of the OSI Model and a Prevalent Lan Model in the Client Server Arena"

Ted Mims - Project Supervisor

Marguerite Summers - Student Choice

Ann Larson - Dean Representative

Jie Xie

"Implications of Hypercard Stacks for Problem Based Learning Modules"

Ted Mims - Project Supervisor

Margureite Summers - Student Choice

Gary Butler - Dean Representative



## Appendix C

### Other Masters Project Committees

Kevin Carmody

"A Personal Computer Database Accounting System for the Department of General Engineering at the University of Illinois"

Robert Meeder - Project Supervisor

Ted Mims - Student Choice

William Martz - Dean Representative

ChaoJing Yuan Chang

"Supporting Mathematical Sciences Student Information System Using INGRES Advanced Software Development Facilities"

Marguerite Summers - Project Supervisor

Ted Mims - Student Choice

Chung-Hsien Sung - Dean Representative

Kevin E. Harris

"Algorithms for Accelerating Ray Tracing"

Scott Grissom - Project Supervisor

Ted Mims - Student Choice

Christa Hockensmith - Dean Representative

Ravidra Ramareddy

"Implementation of Geographic Database Using Object Oriented Methodology"

Marguerite Summers - Project Supervisor

Ted Mims - Student Choice

Richard Sames - Dean Representative

Michael R. Sharkey

"Develop an Ingres 4GL Application to Streamline Employment Functions"

Marguerite Summers - Project Supervisor

Ted Mims - Student Choice

David Jenkins - Dean Representative

Yun-Wei (Jill) Yang

"A Software Development Environment Based On the Intel 486 Architecture For Use by Computer Science Faculty and Students"

Marguerite Summers - Project Supervisor

Ted Mims - Student Choice

Gary Trammell - Dean Representative

Abdul Shabazz

"Term Limits: the Last Hope for Democracy or Just a Stupid Voter Bill"

Mary Bohlen - Project Supervisor

Dave Everson - Student Choice

Ted Mims- Dean Representative

Hans Suchy

"Research on Skin Grafting"

William Martz -Project Supervisor

Ann Larson - Student Choice

Ted Mims-Dean Representative

## Appendix D

### Applied Study Term Projects Supervised

Summer 1991

Paul Brown  
Eric Goebel  
Federated Computer Systems  
IL Secretary of State

Spring 1992

Gregory Morrison  
Jay Barr  
Marie Joseph  
SIU School of Medicine  
SSU Computer Science Program  
IL Dept of Rehabilitation

Spring 1993

Hongbo Chen  
Donald Decker  
Brian Giacomini  
Blame Smith  
IL Dept of Rehabilitation  
IL Secretary of State  
Giacomini Custom Builders  
Dickey-john Corp.

Summer 1993

James Black  
Wade Morris  
Terri Stauffer  
Patrick Sullivan  
Douglas VanBuskirk  
Persis Wallace  
IL Dept of Insurance  
Dauphine Computers  
The Michie Company IL  
Dept of Rehabilitation  
NSF Research Project  
Hurletron, Inc.

Fall 1993

Can Ulker  
Persis Wallace  
SSU Academic Computing Services  
Hurletron, Inc

Spring 1994

Masoud Mobli  
David Moore  
Kimberly Wrigley  
TKI Foods  
Systems Evaluation & Analysis (SEA) Group  
Archer Daniels Midland Company

Summer 1994

Patrick Provart  
Pamela Williams  
IL Secretary of State  
Horace Mann

Fall 1994

Wayne Dahlen  
SEA Group

Spring 1995

Juan Dangond  
Christian Hernandez  
Gurel Tokgos  
Tawechai Wuttivorrvatana  
SSU-Athletic Dept.  
SSU-Computer Services  
SSU-Athletic Dept.  
SSU-Academic Computer Services

Summer 1995

Durga Gorantla

Michael Lancaster

Cheryl Pearson

Brian Pellhum

Thomas Sidener

Dickey-john Corporation

NSF Research Project

First of America Bank

Horace Mann

NSF Research Project

## Appendix E

### National Science Foundation Research Experiences for Undergraduates

#### Student Research Supervised:

Summer 1993: Douglas Van Buskirk - Parallel Processing "Generation of Magic Squares Using Parallel Processing," The Fourth Annual Symposium for Undergraduates in Science, Engineering and Mathematics, Argonne National Laboratory, November 1993.

Scott Nafziger - Networks

"Unix System Security," The Fourth Annual Symposium for Undergraduates in Science, Engineering and Mathematics, Argonne National Laboratory, November 1993.

Summer 1994: Doug Thayer - Networks "Building Access Webs," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.

Persis Wallace - Parallel Processing "Parallel Processing of an Existing FORTRAN Application in a Supercomputing Environment," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.

Summer 1995: Mike Lancaster – Networks

Work in progress

Thomas Sidener - Networks

Work in progress

## Appendix F

### Editing Student Papers for Publication

Mike McGraw - "Utilizing an Object-Oriented Language to Implement Semaphores and Shared Memory," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.

Doug Thayer - "Building Access Webs," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.

Persis Wallace "Parallel Processing of an Existing FORTRAN Application in a Supercomputing Environment," The Twenty-Eighth Annual Small College Computing Symposium, Sioux Falls, SD, April 1995.

Douglas Van Buskirk - "Generation of Magic Squares Using Parallel Processing," The Fourth Annual Symposium for Undergraduates in Science, Engineering and Mathematics, Argonne National Laboratory, November 1993.

Scott Nafziger - "Unix System Security," The Fourth Annual Symposium for Undergraduates in Science, Engineering and Mathematics, Argonne National Laboratory, November 1993.