Manton M. Matthews

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1 Education

- Ph.D. (Mathematics) University of South Carolina, 1980

- M.S. (Computer Science) University of South Carolina, 1980

- M.S. (Mathematics) University of South Carolina 1977

- B.S. (Mathematics) University of South Carolina (1969-Jan. 1972)

2 Honors and Awards

While not strictly an official honor, there have been five International workshops on the Matthews-Sumner Conjecture. This conjecture is that every clawfree 4-connected graph is hamiltonian. It was published in the Journal of Graph Theory in 1984. There has been considerable effort on it, but it is still an open question. A reference to the 5th workshop is http://iti.zcu.cz/domazlice08/ . It is also been classified as simple, surprising, very old, and prolific in *Beautiful Conjectures in Graph Theory,* by Adrian Bondy http://www.ecp6.jussieu.fr/pageperso/bondy/problems/beautiful.pdf.

3 Academic Experience

2014-present Professor, Chair, Department of Computer Science and Engineering, University of South Carolina.

2013-2014 Professor, Associate Chair, Director of Graduate Studies, Department of Computer Science and Engineering, University of South Carolina.

1987-2013 Associate Professor, Associate Chair, Director of Graduate Studies, Department of Computer Science (and since 2001 CS and Engineering), University of South Carolina.

2005-2006 Acting Chairman, Department of Computer Science and Engineering, University of South Carolina.

1990-1991 Acting Chairman, Department of Computer Science, University of South Carolina.

1982-1983 Visiting Scholar, Department of Computer Science, Univ. of North Carolina at Chapel Hill. (on leave with full pay from USC)

1981-1987 Assistant Professor, Department of Computer Science, University of South Carolina.

1980-1981 Visiting Assistant Professor, Dept. of Comp. Sc., Univ. of South Carolina.

1979-1980 Lecturer in Computer Science, Department of Mathematics, Computer Science and Statistics, University of South Carolina.

4 Major Professional Contributions

2005-present Commisioner, ABET Computing Accreditation Commission, one of 29 commisioners voting on accrediatation of Computer Science, Informations Systems and Information Technology degree programs.

2003-present ABET Computing Accreditation Commission, team chair for accreditation visits to Computer Science, Information Systems, and Information Technology programs.

1997 Program Chairman for the Tenth International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, Atlanta, GA, 1997.

1992 Treasurer for the International Society for Applied Intelligence.

1991-1992 Member of the Editorial Board for *Applied Intelligence.*

1990 Program Chairman for the Third International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, Charleston SC, 1990.

1989, 1990, 1992, 1994, 1995, 1997-2000 Computer Science Accreditation Commission site evaluator.

2001-2003 ABET CAC site evaluator.

5 Funded Research

Projects totalling $722,480.

1. Thirty-nine small grants over the period 1994-2010 totaling slightly over $385,000.

2. 'Arc/Info Digitizing-Editing ESRI Maps,' $6360, Research Planning Inc., Aug. 92 - May 93.

3. 'Sentencing information retrieval and Criminal Offense Coding,' May 4, 1992 - Aug 17, 1992, $48,000, Bureau of Justice Statistics through State Law Enforcement Division.

4. 'Information Systems and Performance,' $6018, Department of Health and Evironmental Control, March - May 1992($3,000), with continuation till August ($3,018).

5. 'File Transfer Technology Application in Use of Court Information,' State Justice Institute, Oct 91 - Oct 92, $31,932 to Computer Science Department. Joe Johnson was PI, but I was listed as 'the senior person directing the computational details of the project.'

6. 'Arc/Info Digitizing-Editing ESRI Maps,' $6540, Research Planning Inc., Aug. 91 - Aug 92.

7. 'Active Learning Assistance Interfaces,' NCR Corporation, 1985-1987, $161,416, with additional loaner equipment $60,000, subsequently donated to the department.

8. 'Semantics of Functional Programming Languages,' $14,577 (summer support 1983 supplement to Stanat-Latch) NSF MCS 8104217.

9. 'Automatic Code Generation,' Honeywell Corp. 1984, $5300.

6 Refereed Publications

1. S. Xu, C.-T. Huang, M. Matthews, "Secure Multicast in WiMAX Networks," Journal of Networks, Vol. 3, No. 2, February 2008.

2. C.-T. Huang, M. Matthews, M. Ginley, Xinliang Zheng, Chuming Chen, J. Chang, "Efficient and Secure Multicast in WirelessMAN: A Cross-layer Design," Journal of Communications Software and Systems, Vol. 3, No. 3, September 2007.

3. "USCSH: An Active Intelligent Assistance System," with Walter Pharr, Gautam Biswas, and Harish Neelakandan, *Artificial Intelligence Review,* vol 14, April 2000, pp. 121-141.

4. "Parallel Parsing of Ambiguous Languages," with Richard Reid, in Lecture Notes in Computer Science, vol. 604, Springer-Verlag 1992, pp 539-545.

5. "Techniques for Algorithms in $K_{1,3}$-free Graphs," *Congresses Numerantium,* 69 (1989), pp 77-86.

6. "Implementation of an FP-Shell," with Y. Kamath *IEEE Transactions on Software Engineering,* May, 1987, pp. 532-539.

7. "Longest Paths and Cycles in $K_{1,3}$-free graphs," *Journal of Graph Theory,* Vol. 9 (1985) 269-277.

8. "Extremal results in $K_{1,3}$-free graphs," *Congresses Numerantium,* Vol. 49 (1985) 49-56.

9. "Hamiltonian results in $K_{1,3}$-free graphs," *Journal of Graph Theory,* Vol. 8 (1984) 139-146.

10. Chuming Chen and Manton M. Matthews, "Metrics for Evaluating the Semantic Implications of Changes in Evolving Ontologies," The 2008 International Conference on Semantic Web and Web Services (SWWS'08: July 14-17, 2008).

11. Chuming Chen and Manton M. Matthews, "A New Approach to Managing the Evolution of OWL Ontologies," The 2008 International Conference on Semantic Web and Web Services (SWWS'08: July 14-17, 2008).

12. Sen Xu, C.T. Huang, M.M. Matthews, "Modeling and Analysis of IEEE 802.16 PKM Protocols using CasperFDR," accepted by IEEE International Symposium on Wireless Communication Systems 2008.

13. M. Ginley, S. Xu, C.-T. Huang, M. M. Matthews, "Efficient and Secure Multicast in WirelessMAN", Proceedings of International Symposium on Wireless Pervasive Computing 2007 (ISWPC2007), February 2007.

14. Chuming Chen and Manton M. Matthews, "Extending Description Logic for Reasoning about Ontology Evolution," 2007 IEEE/WIC/ACM International Conference on Web Intelligence.

15. X. Zheng, C.T. Huang, M.M. Matthews. "Centralized and Decentralized Group Key Management," Proceedings of Computer Security Conference 2007, April 2007.

16. X. Zheng, M.M. Matthews, C.T. Huang, "Hierarchical Scalable Group Key Management Based on the Chinese Remainder Theorem," Proceedings of 6th Annual Security Conference 2007, April 2007.

17. Sen Xu, C.T. Huang, M.M. Matthews. "Secure Multicast in Various Scenarios of Wireless MAN," Proceedings of IEEE Southeast Conference 2007, March 2007. A

18. "A Dual Authentication Protocol for IEEE 802.11 Wireless LANs," Xinliang Zheng, Chuming Chen, Chin-Tser Huang, Manton M. Matthews and Naveen Santhapuri, submitted to 2nd International Symposium on Wireless Communication Systems 2005 (ISWCS2005) September 5-7, 2005 Siena, Italy.

19. The 2004 International Conference on Internet Computing, Las Vegas, Nevada, June 21-24, 2004 "A Web Interface for Nessus Network Security Scanner," with Chuming Chen.

20. "Oracle: a Knowledgeable User Interface," with Gautam Biswas 1985 COMPSAC, 9th Computer Software and Applications Conference 287-294.

21. "Raising User Proficiency Through Active Assistance: An Intelligent Editor," with Gautam Biswas Proceedings of the Second International Conference on Artificial Intelligence Applications, Dec. 11-13, 1985, 358-363.

22. "A Massively Parallel Expert Sytem Architecture for Chemical Structure Analysis," with Ron Sobczak, The Fifth Distributed Memory Computing Conference, pp. 11-17, 1990.

23. "Using a Distributed Blackboard Network for Solving Organic Spectroscopy Problems," with Ron Sobczak, Proceedings of the AAAI workshop on Blackboard Systems, 1990.

24. "USCSH: An Active Assistance Interface for Unix," with G. Biswas, and Harish Neelakandan, Proceedings of the Intelligent Tutoring Systems 1988 (ITS-88), Montreal, Canada, 334-341.

25. "An Intelligent Assistance System in the Unix Domain," with Harish Neelakandan and Gautam Biswas, Third IEEE Expert Systems in Government, pp. 55-64, 1987.

Other Refereed Publications

26. SAM'04: Proceedings of the international conference on Security and Management, Las Vegas, Nevada June 21-24, 2004 "A Graphical Password Scheme Strongly Resistant to Spyware," with Dawei Hong, Shushuang Man, and Barb Hawes, pages 94-100.

27. Proceeding of the 2003 international conference on Security and Management, Las Vegas, Nevada June 23-26, 2003, "A shoulder surfing resistant graphical password scheme - WIW," Shushuang Man, Dawei Hong, Manton Matthews, pages 105-111.

28. "A DRT Analysis of Counterfactuals," with Bruce Martin (Ph.D. student) in the Proceedings of the International Workshop on Computational Semantics (IWCS-5), Tilberg, Netherlands, Jan. 2003.

29. "An Expert System for Chemical Structure Elucidation Implemented on a Blackboard," with Ron Sobczak, The Third International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, pp 91-98, 1990.

30. "KDL: A Hyper-Semantic Data Model Specification Language," with W. D. Potter, R. P. Trueblood and C. M. Eastman, Proc. of 2nd International Symposium on Methodologies for Intelligent Systems Conference, Oct, 1987, Charlotte, N. C.

31. "Automatic Code Generation for Microprocessor Based Systems," with Ron Sobczak, Proceedings of 1985 ACM SIGSMALL Symposium on Small Systems, 64-69.

32. "On the Use of Functional Interfaces to Distributed Systems," Proc. of the First International Workshop on Expert Database Systems, 725-729, 1984.

7 Other Papers

1. "Heterogeneous AI Computations on Hypercube Architectures," accepted for presentation at the Fifth Distributed Memory Computing Conference, April 1990.

2. "Parallel Parsing of Ambiguous Languages on Hypercube Architectures," with Richard Reid, Fifth Annual USC-CS Symposium, April 7-8, 1989 pp 95-102.

3. "The Electronic Lab Assistant," with Ron Sobczak, Proceedings IEEE SouthEastCon 87, April 1987, pp. 499-502.

4. "Automatic Generation of a Keyword Facility for an Intelligent Assistance System," with Ron Sobczak and Gautam Biswas, Proceedings SPIE Applications of AI Conf. April 1987, 444-447.

5. "A Response Generation Mechanism for an Intelligent Assistance System," with Ron Sobczak and Gautam Biswas, ACM 87, pp. 128-132, St. Louis.

6. "An Intelligent Assistance System for Unix Text Formatters," with Antang Huang and Gautam Biswas, ACM 87, pp. 53-57, St. Louis.

7. "An Intelligent Tutor for elementary Spanish," with Christine Poinsette, Proceedings SPIE Applications of AI Conf. April 1986, pp 642-644.

8. "Designing the Knowledge Base for an Assistance System for Vi," with G. Biswas, C. Matthews, P. Rabon and R. Wilhite 1985 IEEE Systems, Man and Cybernetics Conference Nov 11-15, 1985.

9. "Levi: A Prototype Active Assistance Interface," with Ted Nolan, Proceedings of 1985 USENIX Assoc. Meeting, Portland, Oregon, June 11-14 1985, 325-331.

10. "The FP-Shell," with Yogeesh Kamath, Proceedings of the 1984 USENIX Association Meeting, 133-140.

11. "Functional Aspects of UNIX", 91-93 Proceedings of IEEE SOUTHEASTCON 83, April 1983, Orlando Florida.

12. "Development of a VAL Interpreter", with Ravi Malhotra, 91-94 Proceedings of 21st Southeast Region ACM Conference, April 1983, Durham N.C.

8 Books

1. Editor with Don Potter and Moonis Ali of the *Proceedings of The Tenth International conference on Industrial and Engineering Applications of AI and Expert Systems*, Published by the Gordon and Breach Science Publishers, 1997, ISBN 90-5699-615-0.

2. Editor with Moonis Ali of the *Proceedings of The Third International conference on Industrial and Engineering Applications of AI and Expert Systems*, Published by the Association for Computing Machinery Press, ISBN 0-89791-372-8.

3. Proceedings of USC Computer Science Symposium 1984: Parallel Processing, editor.

9 Seminars

1. "Knowledge Acquisition for Active Assistance," invited presentation at the AAAI workshop of Unix Help Systems, Univ. California at Berkeley, December 1987. (Invited presentation in this case means a one hour presentation for which all my expenses were paid.)

2. "Oracle: An Active Assistance System," presented at the Syracuse Workshop on "Help Systems," Case Research Center, Syracuse University, May 1986.

3. "Functional Programming Languages and Architectures," Management Science Seminar Series, USC November 1983.

10 Reviews

Served as a referee for:

- National Science Foundation

- Inter. Journal of Man-Machine Studies

- Journal of Graph Theory

- ACM Computing Reviews

- Journal of Approximate Reasoning

- Int. Symp. on Expert Database Systems 1985

- IEEE Systems, Man and Cybernetics

- International Conference on Industrial and Engineering

- Applications of AI and Expert Systems 1989

- Applied Intelligence

11 Professional Societies

- Association for Computing Machinery

12   Academic Service Experience

- Acting Chair CSE 2005-2006, CS 1990-1991, July12-Aug13 1984

- 2001-present Department (CSE) Assistant Chair

- 1987-present Department (CS, CSE) Director of Graduate Studies

- 2008 (CSE Department) Search Committee for Department Chairman

- 2007-2009 University Faculty Senate Steering Committee

- 2007-2009 Chair of University Athletics Advisory Committee

- 2006-2009 University Athletics Advisory Committee

- 2006-2008 College of Engineering and Computing Assessement Coordinator

- 2006-2007 Chair Graduate Council Curriculum Subcommitee Science and Math

- 2004-2007 Graduate Council, Subcommittee for Appeals and Curriculum Subcommittee for Science and Math

- 2004-2006 Chair of University Faculty Committee on Instructional Development

- 2003-2006 University Faculty Committee on Instructional Development

- 2001-2002 University Faculty Senate Steering Committee

- 2001-2002 Chair University Admissions Committee

- 2001 (Comp. Sc. & Engr. Department) Search Committee for Department Chairman

- 2001 Departmental Committee on the Merger of CS and CE Graduate Programs

- 2000 (Computer Sc. Department) Search Committee for Department Chairman

- 1999-2002 University Admissions Committee

- 1990-2000 Department (Computer Science) Assistant Chair

- 1997 Program Co-Chairman (with Don Potter) for the Tenth International Conference on Industrial and Engineering Applications of AI and Expert Systems 1997, Atlanta, GA.

- 1995-1998 University Committee on Academic Standards and Petitions

- 1993-1994 Chair of the Graduate Council

- 1992-1993 Vice Chair of the Graduate Council

- 1992 Chair of the Appeals subcommittee of the Graduate Council

- 1991-1992 Member of the Graduate Council: Appeals subcommitee and the Policies and Procedures subcommittee.

- Program Chairman for the Third International Conference on Industrial and Engineering Applications of AI and Expert Systems 1990, Charleston, SC.

- 1987-present Assistant Chairman

- 1987-1988, 1989-1990, (Departmental) Search Committee for Department Chairman

- 1986-1992 (Departmental) Search Committee (chair)

- 1986-1987 (Departmental) Qualifying Exam Committee

- 1984-1986 Department of Computer Science Hardware Committee

- 1983-1986 Faculty Senator from Computer Science

- 1983-1986 Faculty Advisor for Software Systems for Computer Science

- 1984-1985 College of Science and Mathematics Computer Advisory Committee

- 1984 (July 12 - Aug 13) Acting Chairman for the Department of Computer Science.

- 1984 Subcommittee of the College of Science and Mathematics Computer Advisory Committee for the purpose of evaluation of computer equipment proposals ($500,000 purchase)

- 1984 Program Chairman for 1984 University of South Carolina Computer Science Symposium on Parallel Processing

13 Research Supervision

Current Ph.D. Students

1. Amber Mckenzie, "Multithreaded Natural Language Processing," expected May 2011.

2. Orren McKay, "Modelling, Understanding and Evaluating Student Responses," expected August 2011.

Completed Doctoral Students

1. Chuming Chen, "Ontology Evolution Models," December 2008.

2. Xu, Sen, "Security Protocols in WirelessMAN," Aug. 2008.

3. Martin, Bruce, "A Typology of Ambiguity as it Relates to Natural Language Processing," Dec. 2007.

4. Zheng, David, "Chinese Remainder Theorem Based Group Key Management Protocols," co-directed with Chin-Tser Huang, August 2007.

5. Sobczak, Ronald, "Heterogeneous AI Processing on Hypercube Architectures," May 2001.

Masters Students

1. Chan, Gyi-Gong, 1981, "Software Tools for Translator Development."

2. Kirkland, Donald, 1981, "Design and Simulation of a Basic Data Flow Processor."

3. Hu, Chien-Kuo, 1982, "A Simulation of a Fault Tolerant Dataflow Processor."

4. Yodaiken, Victor, 1982, "A Message Based Inter-Process Communications System for UNIX."

5. Chen, Meauhuey, 1982, "Algorithms for the Connectivity of Graphs."

6. Shu, Jun-Chen, 1982, "A Data Flow Interpreter Simulator."

7. Ma, Chih-Chen, 1982, "Automatic Parser Generation For LL(1) Languages."

8. Wang, Kai, 1982, "Optimal Database Reorganization for a Stochastic Model."

9. Lo, Sheng-Ping, 1982, "An Efficient Algorithm For A Two Team Assignment Problem and Its Generalization."

10. Liu, Sin-Ya, 1982, "An Interpreter for An Applicative-Language: Apply."

11. Bell, Mark, 1983, "FOCUS Number System Implementation."

12. Kamanth, Yogeesh, 1983, "The FP-Shell: A Functional Programming Environment for UNIX." "

13. Lai, Ting-Rong, 1985, "Extending USCFP to the FP-Shell."

14. Rabon, Paige, 1985, "A Knowledge Based Approach to Active Assistance."

15. Groves, William, 1986, "A Voice-Driven, Microcomputer-Based Expert System to Aid in Medical Diagnosis."

16. Liu, Rong-Hsiang, 1986, "Implement UNSW Prolog Interpreter with Explaining Capabilities."

17. Sternfeld, Robert, 1986, "Recursive Definitions in Functional Programming."

18. Wang, Shin-Yung, 1986, "A Knowledge-Based Model for an Active Assistance System for Unix."

19. Pharr, Walter, 1986, "Construction of a Compiler from Denotational Semantics."

20. Gilman, Richard, 1986, "Microcomputing Expert Advisor for Statistical Analysis System Users."

21. Chappell, Richard, 1987, "Term Rewriting Systems for FP Programs to Optimize Their Execution on the Mag" Tree Machine."

22. German, Karyn, 1987, "The Implementation of a Rule-Based Expert System for the Management of Non-Insuli" Dependent Diabetes Mellitus (NIDDM)."

23. El-Khatib, Ahmad, 1987, "Misconceptions in C Due to Pascal Knowledge."

24. Floyd, Margaret, 1987, "The Evolution of Command Languages and an Undo Facility for UNIX."

25. Neelakandan, Harish, 1987, "Language Processor for an Active Assistance Interface."

26. Lester, Cystal, 1988, "Pascal Teaching Assistant (PTA)."

27. Leu, Jennifer, 1988, "An Authoring System for the Patients of Childrens Cancer Research Laboratory a" Richland Memorial Hospital."

28. Williamson, Dwayne, 1988, "The Preference Evaluator: A Model for the Use of Feature Markers and Selectiona" Restrictions in Natural Understanding Systems."

29. Reid, Richard, 1989, "Parallel Parsing of Ambiguous Languages for Hypercube Architectures."

30. Rew, SeungWoo, 1989, "A Network Based Goal Recognizer."

31. Lyons, Beatrice, 1989, "An Authoring System Using X Windows."

32. Phillips, Alan, 1989, "A Spreading Activation Controlled Expert System Model."

33. Gupta, Shashidar, 1989, "Visual Debugging Environment (VIDEO)."

34. Wells, Bradley, 1989, "A Natural Language Processor for USCSH: The Semantic Preference Approach."

35. Tansathein, Dusit, 1989, "Graph Theory Assistant."

36. Hoa, Ai-Ling, 1990, "Hypertext with Inducements System."

37. Wong, Shun Mun, 1991, "AI Graphical Toolkit."

38. Verma, Amit, 1991, "Dynamic Load Balancing on Hypercube."

39. Bhutani, Gagan, 1991, "Study of User Interface Design Techniques and Design and Implementation of " Software Development Environment using X Windows."

40. Mohanty, Pranab, 1991, "Enhancement of the Graph Theory Assistant."

41. Gupta, Manmohan, 1992, "COGNITIVE TOOLS: A Study and An Implementation."

42. Cai, Yu (Cathy), 1992, "X Windows Interface for Legal Sentence Disposition Information."

43. Patterson, Mitchell, 1993, "RISC."

44. Lawson, Horace, 1994, "Development of a Spreadsheet under X-windows with Motif."

45. Zhang, Lin Xin, 1994, "Drawing Planar Graphs Under X-Motif."

46. Sreenivasan, Shyam, 1994, "An Object Oriented Inter-Process Communication Code Generator."

47. Chen, Jing Jing, 1994, "A QBE Retrieval Sustem for SQL Databases."

48. Cao, Jianmin, 1994, "Automated Critiquing for C Programs (Project)."

49. Pan, Hsiung, 1994, "WYSIWYG Table Editor for Latex."

50. Gella, Kamal, 1995, "A Compiler to Translate Latex Documents to Hypertext."

51. Medapati, Raviram, 1995, "A Class-T.A. Assignment System."

52. Shroff, Nilesh, 1995, "Knowledge Acquisition from Texts: Unix On-Line Manual Pages (P-Type)."

53. Han, Min, 1995, "Graphical User Interface for an Appointment Scheduler."

54. Marella, Purushotham, 1995, "MS Windows (Simple User Interface Toolkit) Interface for Sentence Disposition Information."

55. Altman, Mitchell, 1996, "Network Foundation Classes for WIN32."

56. Golla, Vidyasagar, 1996, "Authoring System and Browser for Hypertext."

57. Patnaik, Sribardhan, 1996, "Foundation for Automated Theorem Proving a Graph Theory Assistant."

58. Yalamanchili, Satish, 1996, "Automated Advisement System."

59. DCosta, Peter, 1996, "A Graphical User Interface for Converting Documents into HTML."

60. Smith, Richard, 1996, "Teaching Assistant Assignment System."

61. Parasa, V. Rao, 1996, "Dynamic Display of Data Structures."

62. Garageshwara, Jeeth, 1996, "Exploring Extensions to HTML Through Developing a Student Information System on the World-Wide Web."

63. Mani, Rajalekshmi, 1996, "Graphical User Interface for Monitoring Distributed Computations."

64. Chowdary, Sunchu, 1997, "Faculty Scheduling System."

65. Jia, Changjiang, 1997, "A Public Facility Reservation System on the World Wide Web."

66. Samman, Firas, 1997, "The Student Advisement Program on the Web Using Java, CGI, and Mini SQL."

67. Yu, Xudong, 1997, "A Web-Based Graduate Application Information System."

68. Ramesh, Anthony, 1997, "A Direct Manipulation Interface Builder for WCL."

69. Rabieh, Abdollah, 1998, "Migration from the Student Database to the Alumni Database and Surrounding Support."

70. Kalva, Sunil, 1998, "Document Indexing and Analysis Tools for the Web."

71. Liu, Zhuozhou, 1998, "A Software Tool for Generating Questionnaire Surveys on the World Wide Web: A Special HTML Editor and a CGI Program."

72. Qu, Xiaosu, 1998, "The Analysis of a Self-Paced Mastery Oriented Coutse and the Creation of an Online Self-Paced Course System through Introducing New Technologies."

73. Sha, Guohua, 1998, "Generation of Catalogs of Combinational Objects."

74. Korupolu, Sekhar, 1998, "Comparison of GUI Toolkits."

75. Shen, Xiaoyan, 1998, "Design and Implementation of Multiple Digital Signatures."

76. Wu, Cheng, 1998, "A Comparison of Three Database Systems for a Student Information System on the World Wide Web."

77. Mandla, J. Reddy, 1998, "Course Management on the Web Using Java."

78. Liu, Funing, 1998, "Automatic Updates of Office Information."

79. Churi, Salil, 1999, "Web-Based Interface for Graduate Schools Online Applicant and Student Information Systems."

80. Puligandla, ChandraSekharam, 1999, "Object-Oriented Design & Development of an IMAP-Based Mail Client."

81. Dason, Ajay, 1999, "System for Electronic Transfer of Student Assignments."

82. Bathula, Praveen, 1999, "Multi Platform Licensed Software Detection Tool."

83. Hicks, Julie, 1999, "Enforcing the Prerequisite Structure & Grade Policies In CS Courses at the Univ of SC."

84. Sun, Yuqing, 1999, "The Authorization of Web Documents."

85. Kedia, Rajiv K., 1999, "Electronic Forms for Graduate School Management."

86. Yang, Xike, 1999, "Computer Aided Origami."

87. Maniar, Samir, 1999, "MS-Access Application and Web-Based Query Engine for Grants and Proposal Mainenance."

88. Chen, Yun, 1999, "Testing Object-Oriented System LEDA."

89. Basak, Indranil, 2000, "A Comparative Study of Object-Oriented Development.."

90. Zeng, Tao, 2000, "A Voice Mouse System.."

91. Dason, Maria, q 2000, Advanced Cursor for Teradata Object Relational DBMS.."

92. Baig, Kaleem, 2000, "Student Survey System."

93. Tyagi, Raman, 2000, "Web-based Interface of Forms Supporting Multiple Signatures."

94. Yao, Qing, 2000, "Secure Access to Database."

95. Wu, Bin, 2000, "Simulation of a Lithium-Ion Battery on the Web with Java Language."

96. Mishra, Suman, 2000, "Predicting the Behavior of S&P500 Stock Index."

97. Kini, Sanjay, 2000, "Student Survey System."

98. Kalyanasundaram, Muralidharan, 2000, "Automated Structural Test Tool For JAVA Source."

99. Chaudhari, Manjusha, 2000, "Image Database Management System."

100. Li, Yang, 2000, "The Design and Implementation of On-line Homework and Tests."

101. Wang, Qun, 2001, "A Web Application for Students and Prospective Employers."

102. Krishnaswamy, Indu, 2001, "Simulation of Investment Strategies with Respect ot Mutual Funds."

103. Ryu, Seang Chan, 2002, "Web Based Application for Graduate Admissions Decisions."

104. Chen, Chumming, 2003, "A Web Interface for Nessus Network Security Scanner."

105. Siripurapu, Harish, 2003, "Intrusion Detection: Implementation of a Level II Honeynet"

106. Santhapuri, Naveen, 2004, "An Implementation and Comparative Analysis of the RSN and WDAP Wireless Authentication Protocols."

14 Teaching Experience / Curriculum Development

- Graduate Courses

  - CSCE 742 Software Architectures
  - CSCE 771 Natural Language Processing
  - CSCE 741 Software Process
  - CSCE 747 Software Testing
  - Artificial Intelligence
  - Knowledge Based Systems
  - Logic; Logic Programming
  - Analysis of Algorithms
  - Automata and Computability
  - Computer Architecture
  - Compiler Construction
  - Speech Processing
  - Semantics of Programming Languages

- Undergraduate Courses

  - Artificial Intelligence
  - Compiler Construction
  - Programming Languages
  - Systems Programming
  - Data Structures
  - Assembler Language
  - Numerical Methods
  - Computer Architecture (sophomore level)
  - Advanced Algorithmic Design
  - CS 1 (during the Pascal era)
  - CS 2
  - Computers in Society
  - Fortran

- Courses Developed

  - Resurrected 574 Robotics, teaching it for the first time in over 5+ years.
  - CSCE 517 Computer Forensics with Ronni Wilkinson
  - CSCI 791 Logic Programming
  - CSCI 510 Unix Systems Programming
  - CSCI 700 Seminar in Computer Science Research

- Curriculum Development: While Acting Chair in 1991, I led group that developed proposal for the Computer Information Systems degree at South Carolina.

  - I wrote most of the proposal after initial sample program was prepared by Robert Trueblood. I guided the proposal through university and Commission on Higher Education committees.

- – As the Graduate Director (2000) of the newly emerged Department of Computer Science and Engineering I led the graduate committee in merging previous degrees to form the Computer Science and Engineering Master of Science, Master of Engineering and PhD degrees.

- – As Acting Chair (2005) I led the negotiation effort to get agreement from the Business School to allow our CIS students to get a minor which formed an "Information Systems Environment" that satisfied accreditation by ABET.

- Unix Short Course: with Bob Cannon, Steve Wright and Jay Waller developed and taught a short course on Unix.