

RESUME OF  
MANUEL ENRIQUE BERMUDEZ

PERSONAL DATA.

Date of birth: June 21, 1957.

Citizenship: U.S.A.

Marital status: Married, with twin children.

Ethnic group: Hispanic.

Languages: English, Spanish (completely fluent: neither is a second language). Can converse in Portuguese and Italian.

Home Address: 2209 SW 95th Terrace, Gainesville, Florida 32607, U.S.A.

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Research Interests: Programming Languages, Compilers, Automata Theory, Programming Linguistics, Software Engineering.

Professional Interests: Transfer of Technology and Academic Cooperation with Latin America, Computer Ethics.

EDUCATION .

Bachelor of Science, Computer Science, University of Costa Rica, 1979.

Licenciado, Computer Science, University of Costa Rica, 1980.

Master of Science, Computer and Information Sciences, University of California, Santa Cruz, December 1982.

Ph.D., Computer and Information Sciences, University of California, Santa Cruz, June 1984.

PROFESSIONAL EXPERIENCE.

1980-1981: Assistant Professor, Department of Computer Science, School of Mathematics, University of Costa Rica.

1981-1984: Teaching Assistant, Research Assistant, Teaching Fellow and Associate in Computer Science, Computer and Information Sciences Board of Studies, University of California, Santa Cruz.

1984-1985: Visiting Assistant Professor, Computer and Information Sciences, University of California, Santa Cruz.

1985-1990: Assistant Professor, Computer and Information Sciences, University of Florida.

1990-present: Associate Professor, Computer and Information Sciences, University of Florida.

1986-1992: Instructional Consultant, IBM.

1996-1997: Fulbright Scholar visiting the University of Costa Rica.

2000-2001: Consultant, Load Media Networks, Inc, Hollywood, California.

**COURSES TAUGHT:**

## At the University of Costa Rica:

1. MA-201 Matemática Básica.
2. MA-500 Seminario de Construcción de Compiladores (in 1980).
3. MA-355 Métodos Numéricos.
4. CI-2409: Construcción de Compiladores (in 1996).

## At the University of California, Santa Cruz:

1. CIS-10 Introduction to Cybernetics.
2. CIS-12A The Nature of Computation.
3. CIS-12B The Nature of Computation.
4. CIS-100G Introduction to Programming.
5. CIS-101 Data Structures.
6. CIS-104A Programming Linguistics - Syntax.
7. CIS-104B Programming Linguistics - Semantics.

## At the University of Florida:

1. COT-3001 Discrete Structures.
2. COP-3212/3020 Introduction to CIS.
3. CGS-3460 Programming using C.
4. COP-3530 Data and Program Structures (now Data Structures and Algorithms).
5. COP-3603 Software System Development.
6. COP-4640/4620 Translators.
7. COP-4020 Programming Language Concepts.
8. COP-5506/5550/5555 Principles of Programming Languages.
9. COP-5641/5625 Programming Language Translators I.
10. COP-6642 Programming Language Translators II.
11. COP-6934 Special Topics - Automatic Generation of Translators.
12. One credit-hour courses on various programming systems and languages: C, C++, Smalltalk, Ada, and UNIX.
13. CGS-3090 Ethics in the Electronic Frontier.

**UNIVERSITY AND PROFESSIONAL ACTIVITIES**

## University Activities.

- 1) Member, Graduate Studies Committee, CIS Department, 1985-86.
- 2) Member, Facilities and Equipment Committee, CIS Department, 1985-86.
- 3) Member, panel of judges for the Florida Junior Academy of Science's state-wide scientific paper competition, April 10, 1986.
- 4) Organizer and presenter, short course entitled "UNIX SEMINAR", MODCOMP, Inc., Ft. Lauderdale, Florida, June 10, 1986.
- 5) Graduate Coordinator, CIS Department, and Chairman, Graduate Studies Committee, CIS Department, 1986-87 and 1987-88.
- 6) Member, College of Engineering Committee for the Selection of Candidates for Graduate Council Fellowships, February, 1987.

- 7) Chairman, College of Engineering Committee for the Selection of Candidates for Graduate Council Fellowships, February, 1988.
- 8) Member, Comprehensive Exam Committee, CIS Department, 1988-89, 89-90, 90-91, 92-present.
- 9) Member, Graduate Studies Committee, CIS Department, 1988-1993.
- 10) Chairman, Teaching Assistantship Committee, CIS Department, 1988-89.
- 11) Commencement Marshall for the CIS Department, 1988-1989, 1991-92 and 1992-93.
- 12) Faculty Advisor, Hispanic Student Association, 1989-1994.
- 13) Founding Member and Membership Committee Chairman, Hispanic Faculty Association, University of Florida, 1990. President-Elect of the Association, 1991-92. President of the Association, 1992-93.
- 14) Member, Affirmative Action Advisory Council, Graduate School, University of Florida, 1990-91 and 1991-92.
- 15) Faculty Advisor, Computer Science Honor Society of Upsilon Pi Epsilon, University of Florida, 1990-91 and 1991-92.
- 16) Member, Council on Affirmative Action, University of Florida, 1991-1994.
- 17) Chairman, Social Committee, CIS Department, 1991-92.
- 18) Member, Faculty Search and Screening Committee, 1992-93.
- 19) Graduate Coordinator and Chairman, Graduate Studies Committee, CISE Department, 1994-95.
- 20) Member, Graduate Studies Committee, CISE Department, 1997-present.
- 21) Chairman, CISE Department Comprehensive Examination Committee, 2000-present.
- 22) Faculty Coach, IPPD (Integrated Product and Process Design) Project with Dell Corporation, 2001-2002.

#### Professional Activities.

- 1) Member, Association for Computing Machinery - Special Interest Group on Programming Languages.
- 2) Member, Institute of Electrical and Electronic Engineers, Computer Society.
- 3) Session Chair, Real-Time and Prototyping System Languages, IEEE Computer Society 1988 International Conference on Computer Languages, Miami Beach, Florida, October 10-13, 1988.
- 4) Organizing Committee Member, Electronic Contact for USA and Latin America, and Acting Program Committee Chairman, International Conference on Computing and Information ICCI'90, Niagara Falls, Canada, May 23-26, 1990.
- 5) Book Exhibits Chair, Eighteenth Annual ACM SIGPLAN-SIGACT Symposium on the Principles of Programming Languages (POPL), Orlando, Florida, January 21-23, 1991.
- 6) Session Chair, 29th Annual ACM Southeast Regional Conference, April 10-12 1991, Auburn, Alabama.
- 7) Program Committee Member, 30th Annual ACM Southeast Regional Conference, April 8-10, 1992, Raleigh, North Carolina.
- 8) Associate Editor, IPCT, Interpersonal Computing and Technology: An Electronic Journal for the 21st Century, 1993-1996.
- 9) Invited guest, North Florida Journal, WUFT's state-wide public affairs television program, to discuss the impact of Y2K, March 31, 1999.
- 10) Invited participant, National Science Foundation sponsored Workshop on Computer Ethics, May 30 - June 3, 2001, Colorado School of Mines, Colorado.
- 11) Invited participant, Microsoft Research Faculty Summit, Redmond Washington, 2001, 2002.

- 12) Referee for the following journals and conferences:
- ACM Transactions on Programming Languages and Systems, 1987, 1990, 1993-1995, 2000-2002.
  - ACM Letters on Programming Languages and Systems, 1992, 1994.
  - ACM Southeast Regional Conference, 1996-1998.
  - Computer Languages Journal, 1989, 1991, 1992.
  - International Conference on Data Engineering, 1989.
  - Computer Software and Applications Conference, 1989.
  - International Conference on Parallel Processing, 1988 and 1989.
  - International Conference on Computer Languages, 1990.
  - Acta Informatica, 1990.
  - Computing Reviews, 1990, 1991, 1992, 1994, 1995, 2002.
  - Computers and Mathematics with Applications, 1991.
  - IEEE Transactions on Software Engineering, 1993, 1995.
  - The Computer Journal, 1994, 1997.
  - Third IEEE Workshop on Program Comprehension, 1994.
  - Information Processing Letters, 1994.
- 13) Book Reviewer for the following publishing companies:
- Addison-Wesley Longman Publishing Company, 1993-1995, 1998-2001.
  - Harper Collins College Publishers, 1993-1994, 1996.
  - W.W. Norton and Company, 1993-1994, 1998.
  - P W S Publishing Company, 1993, 1995.
  - MacMillan Publishing Company, 1993-1994.
  - McGraw-Hill Publishing Company, 1994-1995, 2001.
  - Prentice-Hall Publishing Company, 1994, 2001.
  - Scott Jones Publishing Company, 1998.
- 14) Research Proposal Reviewer for the following organizations:
- Hong Kong University of Technology Software Science Research Center, 1994, 1995.
  - State of Louisiana Board of Regents Research Competitiveness Program, 2001,
  - National Science Foundation MRI (Major Research Instrumentation) Program, 2001.

## HONORS.

- 1) Best teaching evaluation in the CIS Department, University of Florida, Fall 1987.
- 2) Named CIS Department Teacher of the Year by the Association for Computing Machinery Student Chapter at the University of Florida, 1989 and 1996.
- 3) Honorary Faculty Member, the Computer Science Honor Society of Upsilon Pi Epsilon, University of Florida, 1989.
- 4) Listed in Who's Who Among Hispanic Americans, Gale Research, Inc., 1992.
- 5) Listed in Who's Who in the South and Southwest, Marquis, 1995-96.
- 6) Recipient of the University of Florida Teaching Improvement Award (TIP), 1995.
- 7) Appointed Research/Lecturing Fulbright Scholar, visiting the University of Costa Rica, July 1996-January 1997.

- 8) Listed in Who's Who in Engineering Education, AcademicKeys.com, 2002.

#### INVITED TALKS

- 1) Regular Lookahead and Lookback for LR parsers, Bay Area Theory Seminar, University of California, Santa Cruz, September 1984.
- 2) On the Decidability of Whether a Grammar is LALR(k), Workshop on the Mathematics of Languages and Grammars, University of California, Santa Cruz, June 25, 1985.
- 3) An Object-Oriented Methodology for Design and Verification of Software, Department of Computer Science, University Technological College of Bayamón, Bayamón, Puerto Rico, March 16-17, 1989.
- 4) Designing and Verifying Object-Oriented Software, Department of Computer Science, University of Monterrey, Monterrey, Nuevo León, México, November 2-3, 1989.
- 5) LR Parsing Revisited, Department of Computer Science, Harvard University, October 12, 1989.
- 6) Classical Software Engineering Techniques, Department of Computer Science, University Technological College of Bayamón, Bayamón, Puerto Rico, March 20-21, 1990.
- 7) The Object-Oriented Language C++, Department of Mathematics, Mayagüez Campus, University of Puerto Rico, Mayagüez, Puerto Rico, March 22, 1990.
- 8) The Object-Oriented Language Smalltalk, Department of Mathematics, Mayagüez Campus, University of Puerto Rico, Mayagüez, Puerto Rico, March 22, 1990.
- 9) Recent Developments in LR Parsing Theory, CIS Board of Studies, University of California, Santa Cruz, May 8, 1990.
- 10) Formal Methods for the Design and Verification of Software, Department of Computer Science, University of Costa Rica, August 16 and 20, 1990.
- 11) An Overview of the Object-Oriented Languages C++ and Smalltalk, Department of Computer Science, University Technological College of Bayamón, Bayamón, Puerto Rico, May 8, 1991.
- 12) Object-Oriented Design and Verification of Software, Department of Computer Science, University Technological College of Arecibo, Arecibo, Puerto Rico, May 9, 1991.
- 13) The Object-Oriented Language C++, Department of Computer Science, University of Costa Rica, July 16, 1992.
- 14) The Object-Oriented Language C++, Department of Computer Science, Technological Institute of Costa Rica, July 29, 1992.
- 15) The Object-Oriented Language Smalltalk, Third Annual Week of Computer Systems Engineering, Instituto Tecnológico de Estudios Superiores del Occidente (ITESO), Guadalajara, México, September 25, 1992.
- 16) Programming in Smalltalk and C++, Academic Program, FERCOMPUTO '92, San Jose, Costa Rica, September 29,30, 1992.
- 17) The new paradigm of Object-Oriented Programming, invited talk, Computer Systems and Applied Mathematics Symposium, Universidad de Yucatán, Mérida, Yucatán, México, March 14, 1996.
- 18) Object-Oriented Programming, invited talk, Computer Systems Department, Universidad Católica de Santiago de Guayaquil, Guayaquil, Ecuador, October 25, 1996.
- 19) Programming Language Paradigms, invited talk, School of Computer Science and Informatics, University of Costa Rica, March 1997.
- 20) Compilers: A Modern Approach, invited lecture, School of Computer Science and Informatics, University of Costa Rica, March 12, 1998.
- 21) Paradigm Shifts and Trends in Computing in the 21st Century, University of Costa Rica, August 27, 1998.
- 22) Java as a First Language, invited talk, First Computer Systems Symposium, Instituto Tecnológico de Veracruz, Veracruz, México, September 3, 1998.

- 23) The Y2K Problem, invited lecture, University of Honduras, Tegucigalpa, Honduras, May 27, 1999. Also, in San Pedro Sula, May 28, 1999.
- 24) Expected consequences of the Y2K problem, The Village, Gainesville, FL, September 23, 1999.
- 25) Paradigmas y Perspectivas Futuras en Computación, keynote speech, Second Computer Systems Symposium, Instituto Tecnológico de Veracruz, Veracruz, Mexico, March 30, 2000.
- 26) El Caso de Java como Primer Lenguaje, invited talk, Computación 2000 Convention, La Habana, Cuba, May 22-27, 2000.
- 27) Paradigmas y Perspectivas Futuras en Computacion, invited talk, Escuela de Ciencias de la Computacion e Informatica, University of Costa Rica, July 2, 2001. Also Universidad Latina, San Jose, Costa Rica, July 3, 2001.

#### PUBLICATIONS (Books)

1. Study Guide for C Programming: A Modern Approach, W.W. Norton, 1998, 244 pages.
2. Compiler Construction: A Modern Approach, in preparation.

#### PUBLICATIONS (Refereed Journals).

1. Manuel E. Bermudez and Karl M. Schimpf, On the (Non) Relationship between SLR(1) and NQLALR(1) Grammars, ACM Transactions on Programming Languages and Systems, Vol. 10, No. 2, April 1988, pp. 338-342. Also Technical Report UCSC-CRL-86-24, University of California, Santa Cruz, 1986.
2. Manuel E. Bermudez and Karl M. Schimpf, A General Model for Fixed Lookahead LR Parsers, International Journal of Computer Mathematics, Vol. 24, No. 4, 1988, pp. 237-271.
3. Manuel E. Bermudez, LAR(M,C,L) Grammars, International Journal of Computer Mathematics, Vol. 28, 1989, pp. 27-45.
4. Manuel E. Bermudez and K. Schimpf, Practical Arbitrary Lookahead LR Parsing, Journal of Computer and System Sciences, Vol. 41, No. 2, October 1990, pp. 230-250.
5. Manuel E. Bermudez and G. Logothetis, Simple Computation of LALR(1) Lookahead Sets, Information Processing Letters 31, 1989, pp. 233-238.
6. Manuel E. Bermudez, A Unifying Model for Lookahead LR Parsing, Computer Languages Journal, Vol. 16, No. 2, 1991, pp. 167-178.
7. Manuel E. Bermudez, R. Newman-Wolfe and G. Logothetis, Parallel Generation of SLR(1) and LALR(1) Parsers, International Journal of Parallel Programming, Vol. 19, No. 3, 1990, pp. 163-184.
8. Benjamin R. Seyfarth and M. E. Bermudez, Suffix Languages in LR Parsing, International Journal of Computer Mathematics, Vol. 55, pp. 135-153, 1994.
9. John Colby and Manuel E. Bermudez, Lookahead LR Parsing with Regular Right Part Grammars, International Journal of Computer Mathematics, Vol. 64, No. 1, pp 1-15, 1997.
10. John Colby and Manuel E. Bermudez, Error Correction for Incremental LR Parsers, in preparation.  
Manuel E. Bermudez, Regular Lookahead and Lookback for LR Parser, in preparation.

#### PUBLICATIONS (Refereed Conference Proceedings).

1. Manuel E. Bermudez and Karl M. Schimpf, A Practical Arbitrary Look-ahead LR Parsing Technique, Proceedings of the SIGPLAN '86 Symposium on Compiler Construction, Palo Alto, California, June 25-27, 1986, pp. 136-144. Also Technical Report UCSC-CRL-86-20, University of California, Santa Cruz.
2. Manuel E. Bermudez, A Single Algorithm for Several LR Parsing Techniques, Proceedings of the Eighth SCCC International Conference in Computer Science, Santiago, Chile, July 4-8, 1988, pp. 171-179.

3. Manuel E. Bermudez, G. Logothetis and R. Newman-Wolfe, Parallel Generation of LR Parsers, Proceedings of the 1988 International Conference on Parallel Processing, St. Charles, Illinois, August 15-19, 1988, pp. 151-155.
4. Manuel E. Bermudez, A Unifying Model for Lookahead LR Parsing, Proceedings of the Computer Society of the IEEE 1988 International Conference on Computer Languages, Miami Beach, Florida, October 10-13, 1988, pp. 18-24. Also Technical Reports UCSC-CRL-86-18, University of California, Santa Cruz, 1986, and UF-CIS-TR-86-10, University of Florida, August 10, 1986.
5. Manuel E. Bermudez and G. Logothetis, Relation-based Algorithms for Generating SLR(1) and LALR(1) Parsers, Proceedings of the Eighth Annual IEEE International Phoenix Conference on Computers and Communications, Scottsdale, Arizona, March 22-24, 1989, pp. 305-309.
6. George Logothetis and Manuel E. Bermudez, On the Use of Follow Sets in LALR(1) Lookahead Set Computation, Proceedings, ICCI'89 International Conference on Computing and Information, Toronto, Canada, May 23-27, 1989, pp. 31-37.
7. Manuel E. Bermudez and G. Logothetis, Parallel Computation of Closure on Finite Subset Relations, Congressus Numerantium, Vol. 72, 1990, pp. 193-198.
8. George Logothetis and Manuel E. Bermudez, Partial LR(1) Grammars, Proceedings of the 29th Annual SouthEast Regional Conference of the Association for Computing Machinery, Auburn, AL, April 10-12, 1991.
9. Manuel E. Bermudez, R. E. Newman-Wolfe and G. Logothetis, Parallel Computation of Top-Down Context-Free Parsers, Congressus Numerantium, Vol. 83, 1991, pp. 51-56.
10. Manuel E. Bermudez and G. Logothetis, A New Result on State Minimization in LR Parsers, Congressus Numerantium, Vol. 89, 1992, pp. 181-186.
11. Sunit K. Gala, Shamkant B. Navathe and Manuel E. Bermudez, Voltaire: A Database Programming Language with a Single Execution Model for Evaluating Queries, Constraints and Functions, Proceedings of the 9th IEEE International Conference on Data Engineering, Vienna, Austria, April 19-23, 1993.
12. Manuel E. Bermudez and R. Rodriguez, The Design of UNTIL: The "UN" Temporal Interface Language, Proceedings of the Second Software Engineering Research Forum (SERF), Melbourne, Florida, November 5-6, 1992, pp. 109-115.
13. Manuel E. Bermudez and Gil Kraus, Debugging Functional Programs Using Sub-tree Transformations, Congressus Numerantium, Vols. 100-104, 1994.
14. Howard, L.R. and M.E. Bermudez, Parallel Parser Generation: An Analysis of Speedup Factors, Design and Implementation", Proceedings of the 34th Annual ACM Southeastern Conference, Tuskegee, AL, April 17-19, 1996.
15. Manuel E. Bermudez, El Caso de Java como Primer Lenguaje, Proceedings of the International Convention Informatica 2000, and IXth International Convention on Informatics in Education, La Habana, Cuba, May 22-27, 2000.
16. Abdelsalam Helal, Pushkar Pradhan, Kushal Thakore and Manuel E. Bermudez, Un Modelo de Barreras al Comercio Móvil, Proceedings of the XXVII International Latin American Conference on Informatics CLEI'2001, Merida, Venezuela, September 24-28, 2001.
17. Manuel E. Bermudez, A Mobile Commerce Challenge Model, Proceedings of the Scuola Superiore G. Reiss Romoli Winter Conference 2002, L'Aquila, Italy, January 21-27, 2002.
18. Olson, Chandra and Manuel E. Bermudez, Jini: An Investigation in Distributed Computing, in preparation.
19. Manuel E. Bermudez, El Uso de Java en el Curriculum de Ciencias de la Computación, in preparation.

#### PUBLICATIONS (Non-refereed conferences, reports and others).

1. Manuel E. Bermudez and Luis E. Jenkins, Construcción de Compiladores. Un estudio teórico y práctico, (Compiler Construction. A theoretical and practical study), Licenciatura Thesis,

- University of Costa Rica, December 1979.
2. Manuel E. Bermudez, Necesidades de Recursos para las Actividades de Computacion en las Instituciones de Educacion Superior en el periodo 1981-1985, PLANES II. Plan Nacional de Educacion Superior. (Resource requirements for computational activities in the Higher Education Institutions, for 1981-1985, National Plan for Higher Education), San Jose, Costa Rica, August 1980.
  3. Manuel E. Bermudez, Local Extension of a LALR(1) parser to LALR(k), Master's Thesis, University of California, Santa Cruz, December 1982. Thesis Advisor, Dr. Frank DeRemer.
  4. Manuel E. Bermudez and K. Schimpf, Unbounded look-ahead for LALR parsers (or: LALR(k) is DECIDABLE!), Technical Report, University of California, Santa Cruz, 1983.
  5. Manuel E. Bermudez, Regular look-ahead and look-back for LR parsers, Ph.D. Thesis, University of California, Santa Cruz, June 1984. Thesis Advisor, Dr. Karl Schimpf.
  6. Manuel E. Bermudez, Herman Lam, George Logothetis, Shamkant Navathe, Rajshekar Oza, Alexandros Papachristidis, and Stanley Su, An Object-Oriented Computing Environment for Productivity Improvement in Automated Design and Manufacturing, Proceedings of the 25th Annual SouthEast Regional Conference of the Association for Computing Machinery, Birmingham, AL, April 1-3, 1987, pp. 221-227.
  7. Manuel E. Bermudez, A Formalism for OSAM\*, UF-CIS Technical Report TR-87-8, University of Florida, July 31, 1987.
  8. Manuel E. Bermudez and G. Logothetis, LALR(1) Parser Construction in a Nutshell, UF-CIS Technical Report TR-87-7, University of Florida, November 16, 1987.
  9. Manuel E. Bermudez and G. Logothetis, How To Teach LR Parsing, Proceedings of the 26th Annual SouthEast Regional ACM Conference, Mobile, AL, April 21-22, 1988, pp. 606-610.
  10. Manuel E. Bermudez and George Logothetis, Parallel Computation of Closure on Finite Relations, presented at the Twentieth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University, Boca Raton, Florida, February 21, 1989.
  11. Manuel E. Bermudez and George Logothetis, State-Based Lookahead Set Computation for LR Parsers, Proceedings of the 27th Annual SouthEast Regional ACM Conference, Atlanta, Georgia, April 6-7, 1989, pp. 249-253.
  12. George Logothetis and Manuel E. Bermudez, Parallel Computation of Top-Down Context-Free Parsers, presented at the Twenty-Second Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Louisiana State University, Baton Rouge, Louisiana, February 12, 1991.
  13. Manuel E. Bermudez and G. Logothetis, A New Result on State Minimization in LR Parsers, presented at the Twenty-Third Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University, Boca Raton, Florida, February 7, 1992.
  14. Benjamin R. Seyfarth and M. Bermudez, A Strategy for Displaying State Diagrams for LR(0) Parsers, presented at the Twenty-Fourth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University, Boca Raton, Florida, February 24, 1993.

#### CONTRACTS AND GRANTS.

1. A Temporal Approach to Distributed Software Development, Florida High Technology and Industry Council's Applied Research Grants Program, January-December, 1990, for \$20,000. Principal Investigators: R. Rodriguez and F. Anger, University of West Florida, Manuel E. Bermudez, University of Florida.
2. VOLTAIRE: A Database Programming Language, Florida High Technology and Industry Council's Applied Research Grants Program, January-December 1990, for \$36,000. Principal Investigators: Manuel E. Bermudez, Shamkant B. Navathe, University of Florida.

3. A Temporal Approach to Distributed Software Development, Florida High Technology and Industry Council's Applied Research Grants Program, January-December, 1991, for \$50,000. Principal Investigators: R. Rodriguez and F. Anger, University of West Florida, Manuel E. Bermudez, University of Florida.
4. A Temporal Approach to Distributed Software Development, Florida High Technology and Industry Council's Applied Research Grants Program, January-December, 1992, for \$41,962. Principal Investigators: R. Rodriguez and F. Anger, University of West Florida, Manuel E. Bermudez, University of Florida.
5. A Temporal Approach to Distributed Software Development, Florida High Technology and Industry Council's Applied Research Grants Program, January-December, 1993, for approx. \$38,000. Principal Investigators: R. Rodriguez and F. Anger, University of West Florida, Manuel E. Bermudez, University of Florida.
6. Modernization of the Translators Course, Southeastern University and College Coalition for Engineering Education grant, for \$8,000.00, 2000. Principal Investigator: Manuel E. Bermudez.
7. Platform Automated Software Error Detection, Dell Computer Corporeation, IPPD (Integrated Product and Process Design) project, for \$15,000, 2001, 2002. Principal Investigator, Manuel E. Bermudez.

#### GRADUATE STUDENT SUPERVISION.

##### Member, M.Sc. Thesis Committees:

1. Winston Harris, The Use of Frames for Pronoun Reference Resolution in Natural Language Processing, May 1987.
2. Jan O. Alexander, Comparative Evaluation of Expert System Shells Currently on the Market with a Correlation of Relationships Between Expert System Shell Characteristics and Application Topic Requirements, December 1988.
3. Arunkumar Balaraman, A Transaction Specification and Processing Methodology for the NSM Model, December 1989.
4. Karen White, Artificial Intelligence and Retrograde Chess Analysis: The Design of a Production System Core Rule Base and Interpreter, May 1990.
5. Ailing Cha, On the Design of Constraint-Based Graphical Editors, May 1990.
6. Anil Kamath, Transaction Management and Concurrency Control in Federated Information Bases, August 1990.
7. Carmen Ramirez, Networking Component of a Distributed Conferencing System, May 1991.
8. Sean R. Poole, Application of a Personal Computer for the Planning of Cancer Treatments, May 1991.
9. John P. Shuman, Learning by Observation; a Problem Inductive Inference, May 1991.
10. William D. Mooney, A Personal Computer Based Expert System to Aid in the Management of Large Main Frame Data Networy 1991.
11. Randall Blanco, Supporting Very Large Production Systems Using Database Concepts, May 1991.
12. Wade S. Tate, Paradigm Transformation of Domain Modeling for Requirements Engineering, August 1991.
13. Roger Wilson, Improved Change Management for an Exploratory Programming Environment, December 1991.
14. Timothy Lucas, SAGE: A Smart DBMS Using Fuzzy Logic, December 1991.
15. Siddhartha Datta, An Efficient Evolutionary Prototyping System, August 1992.

16. Mario Montes, MATE: The Multiple Access Terminal Emulator, August 1992.
17. Juan Jose Murillo, The Image Algebra Ada Interpreter and Automatic Generation of its Selective Parser, August 1992.
18. Stephen Croll, Towards the Building of an Internal Program Representation: The Ginsu Core, May 1994.
19. Maria Sanchez, Notification Services in Distributed Conferencing Systems, December 1994.
20. Gregory Cory, Developing Expert Systems as Computer-Aided Instructional Applications: TASER, May 1995.
21. Hsiao-Feng Daphne Liu, A Text Parser and Specification Generator for ASN.1-Described Files, August 1995.
22. Mukta Potharaju, Design and Implementation of a Query Processor for an Object-Oriented Database, August 1995.
23. Gary Wright, ADVISE: A Demonstrative Visual Scheme Evaluator to Assist the Novice Programmer, May 1996.
24. Archana Narla, Decision Support Services in Distributed Conferencing System, August 1996.
25. Thomas Davies, A Secure Online Relational Database Application, May 1999.
26. James Hearn, MAX: A Web-Based Asynchronous Messaging System, May 1999.
27. James Jeffers, The Web Education Toolkit, December 1999.
28. Joel Maner, Secure Online Relational Database System (SOROS), May 1999.
29. Ed Porras, Design and Implementation of a Hardware-Independent Parallel Image Manager, May 1999.
30. Skander Slama, Design and Implementation of a Language Parse Tree Object Library Generator with Support for Hybrid Editing, May 1999.
31. John Colby (ex-officio), Master's thesis awarded by the University of California, Santa Cruz, Error Correction for Incremental LR Parser, June 1999.
32. Vidyamani Parkhe, Randomized Decision trees for Data Mining, December 2000.
33. Sung-Kuang Chung, SOGA: Secure Online Grading Assistant, December 2000.
34. Chad Podoski, Instant Messenger for Collaborative Learning Environments, May 2001.
35. Jared Rubin, PLT: Programming Language Tool, May 2001.
36. Deepa Nair, Visual Design Versus Development: A Case Study Presenting How XML and XSLT can Separate Presentation from Data, August 2001.
37. Scott Buntin, XML Schema Inference with XSLT, August 2001.
38. Ryan Donohue, PALMQUES: A Palm OS Questionnaire System with Database Connectivity, May 2002.
39. Michael Procopio, TCab.NET: Decentralized Collaboration Groupware For Mobile Devices Using the Microsoft .NET Framework, May 2002.
40. Nathaniel Nadeau, An XML Information Base and explorer for a Natural Language Question Answering System, May 2002.
41. Lumari Folmer, expected 2002.
42. Arturo Camacho, expected 2002.

Chairman, M.Sc. Thesis Committees:

1. Eric Olson, Design and Implementation of an LAL Parser, May 1989.
2. Gary J. Croucher, Design of a Multiprocessor System Using Bare-Machine Ada, August 1989.

3. Walter Rezzi, AGL: An Attribute Grammar Specification Language, August 1989.
4. Chiu-Ying Lee, An Implementation of an Attribute-grammar-based Back-end of the T-gen System, August 1992.
5. Frederick Wasmer, A Simulation of Adaptation by Natural Selection of Phenotypes in an Artificial Ecology, May 1993.
7. Lynn R. Howard, Parallel Parser Generation: An Analysis of Speedup Factors, Design and Implementation, August 1993.
8. Carol Lynn Anderson (Co-Chair), A Query Language Interpreter for ASN.1-Described Formatted Text, August 1995 .
9. Michael Zimmerman, The Design and Implementation of a Visual Debugger for the Functional Language RPAL, May 1995.
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