

RAFAEL A. PEREZ

Department of Computer Science and Engineering

University of South Florida, Tampa, Florida 33620

EDUCATION:

Ph.D., Electrical Engineering, University of Pittsburgh, 1973

M.S., Electrical Engineering, University of Pittsburgh, 1967

B.S., Electrical Engineering, New Mexico State University, 1965

EXPERIENCE:

August 2015 to present – **Interim Chair**

Computer Science and Engineering Department

College of Engineering, University of South Florida, Tampa, Florida

January 2015 to August 2015 – **Interim Dean**

Patel College of Global Sustainability, University of South Florida, Tampa, Florida

August 2013 to August 2014 – **Interim Dean**

College of Engineering, University of South Florida, Tampa, Florida

December 2005 to August 2015 – **Associate Dean for Academics and Student Affairs**

College of Engineering, University of South Florida, Tampa, Florida

August 2004 to December 2005 – **Associate Chair**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

June 2002 to December 2004 – **Graduate Program Director**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

August 1994 to Present - **Professor**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

August 1987 to August 1994 - **Associate Professor**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

May 1984 to August 1986 - **Assistant Chairman**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

February 1983 to August 1987 - **Assistant Professor**

Department of Computer Science and Engineering, University of South Florida, Tampa, Florida

June 1974 to February 1983 - **Project Manager**

Westinghouse International Company, New York City

I was responsible for the installation and start-up of complex computer control systems in the metal making and paper industries in the United States and overseas in Spain, Brazil, Mexico, Venezuela, and Yugoslavia. My responsibilities included system integration of all the different control equipment to meet final reliability and production acceptance tests.

August 1972 to June 1974 - **Manager**

Westinghouse Health Systems, New York City

I was responsible for the day-to-day administration of a computerized Medical Testing Center and the supervision of its seven member staff. Hospital patients as well as private patients would come to the Center for a complete battery of tests. An on-line computer would collect and interpret the test data from the patients. Prior to the Center's opening, my responsibilities included working on the overall design of the Center and with the hospital physicians in the selection of the medical tests to be offered, the equipment to do these tests, and their integration with the Center's computer.

June 1970 to August 1972 - **Research Engineer**

Westinghouse Research Laboratories, Pittsburgh, PA

I designed computer programs used to predict the manpower and equipment required by Ambulatory Health Care facilities to serve a given population. These programs were used in consulting contracts with the U.S. Government and private business in the area of health care.

RESEARCH GRANTS AND CONTRACTS:

1. University Coordinator, "Targeted Educational Attainment Grant", \$1,600,000 per year with initial year funded by Florida Board of Governors. May 2014 – June 2018.
2. Co-Principal Investigator, "An REU Site on Ubiquitous Sending", \$293,470, funded by the National Science Foundation, April 2011 - March 2014.
3. Co-Principal Investigator, "A REU Site in Computer Science and Engineering", \$308,056, funded by the National Science Foundation, Jan 2008 - December 2010.
4. Co-Principal Investigator, "BPC-DP: CSTEP: Computer Science TransfEr Programs", \$592,715, funded by the National Science Foundation, September 2007 – August 2010.
5. Co-Principal Investigator, "Travel Assistance Device (TAD) to Help Transit Riders", \$82,000, funded by Transportation Research Board of the National Academies – Transit-IDEA (Innovations Deserving Exploratory Analysis) program, December 2006 - December 2007.
6. Co-Principal Investigator, "Enhancing Transit Safety and Security with Wireless Detection and Communication Technologies", \$118,000, funded by Florida Department of Transportation, November 2006 - November 2007.

7. Co-Principal Investigator, "Smart Phone Application to Influence Travel Behavior (TRACT-IT Phase 3)", \$125,000, funded by Florida Department of Transportation, May 2006 - May 2007.
8. Co-Principal Investigator, "Travel Assistance Device (TAD) to Aid Transit Riders with Special Needs", \$87,000, funded by Florida Department of Transportation, December 2005 - December 2006.
9. Co-Principal Investigator, "A Computer Science and Engineering REU Site for Florida, Puerto Rico and Latin America", \$300,000, funded by the National Science Foundation, April 2005 - September 2007.
10. Co-Principal Investigator, "Wireless Video for Instant Access Security System", \$185,000, funded by US Department of Transportation through the University Consortium for Intermodal Transportation Safety and Security, October 2004 - October 2005
11. Co-Principal Investigator, "Traveling Smart: Tracking personal modes of transportation with GPS enabled PDAs – Phase II", \$115,000, funded by the National Center for Transit Research and Florida Department of Transportation, October 2004 - January 2006.
12. Co-Principal Investigator, "Resources In support of Excellence (RISE): A USF/NSF Computer Science, Engineering, & Mathematics Scholarship Program", \$400,000, funded by the National Science Foundation, Sept 2003 – August 2007.
13. Co-Principal Investigator, "Traveling Smart: Tracking personal modes of transportation with GPS enabled PDAs", \$100,000, funded by the National Center for Transit Research and Florida Department of Transportation, July 2003 - October 2004.
14. Co-Principal Investigator, "Enhancing the Rider Experience using real-time transit information", \$75,000, funded by the National Center for Transit Research and Florida Department of Transportation, July 2003 - October 2004.
15. Principal Investigator, "A Neural Network Model for Worksite Trip Reduction", \$35000 Subcontract work for a project funded by Florida Department of Transportation "Worksite Trip Reduction Manual and Model" PI P. Winters. May 2002 – August 2003
16. Principal Investigator, "Improving Search Performance in Telecommunication Databases" \$123,284, Florida High Tech Corridor and Computer Systems and Services, September 2000 to December 2001.
17. Principal Investigator, "Creating a Simulation Environment to Build and Test Very Large Telecommunication Databases" \$128,310, Florida High Tech Corridor and Computer Systems and Services, December 1999 to December 2000.
18. Consultant for "Uv-vis Characterization of Blood: Applications to the Blood Banking Industry" \$200,000, funded by Orthodiagnostic Systems Inc/Johnson & Johnson, Jan 1997 to Dec 1997. Prof. Garcia-Rubio - Chemical Eng. (PI), Prof. R. Potter- Chemistry

(CO-PI) Dr. G. Leparc - Blood Bank (CO-PI)

19. Co-Principal Investigator, "Neural Network Technology Application for the Evaluation of Trip Reduction Programs" \$135,168, Florida Department of Transportation, August 1995 to February 1998.
20. Principal Investigator, "Automatic Knowledge Acquisition for Expert Systems" \$52000, Florida High Technology and Industry Council, January 1993 to June 1994. This project is also supported by Harris Semiconductor with an additional estimated \$25000 "in-kind" support which includes data, software, software engineer's time, and two summer internships for students working on this project.
21. Principal Investigator, "Automatic Knowledge Acquisition for Expert Systems" \$58756, Florida High Technology and Industry Council, January 1992 to December 1992. This project is also supported by Harris Semiconductor with an additional estimated \$30000 "in-kind" support which includes data, software, software engineer's time, and a summer internship for students working on this project.
22. Principal Investigator, "Automatic Knowledge Acquisition for Expert Systems" \$60000, Florida High Technology and Industry Council, January 1991 to December 1991. This project is also supported by Harris Semiconductor with an additional estimated \$35000 "in-kind" support which includes data, software, manufacturing expert's time, software engineer's time, and two summer internship for students working on this project.
23. Principal Investigator, "Knowledge Acquisition and Enhancement of Expert Systems at Harris CMOS and Analog Fabs," \$52,985, Harris Corporation, Melbourne, Florida, September 1989 to January 1991.
24. Co-Principal Investigator, "Teaching Artificial Intelligence and Expert Systems Courses: Content and Strategies for Undergraduate Faculty" \$129,509, National Science Foundation Grant # 8954352 January 1990 to December 1990.
25. Principal Investigator, "Automatic Knowledge Acquisition for Expert Systems" \$54,260, Florida High Technology and Industry Council, January 1990 to December 1990.
26. Principal Investigator, "Enhancement and Development of Expert Systems at Harris CMOS and Analog Fabs," \$80,048, Harris Corporation, Melbourne, Florida and Center for Microelectronic Design and Test, University of South Florida, Tampa, Florida, September 1988 to August 1989.
27. Principal Investigator, "Development of a Knowledge Based System for CMOS Wafer Fabrication Failure Analysis," \$102,199, Harris Corporation, Melbourne, Florida and Center for Microelectronic Design and Test, University of South Florida, Tampa, Florida, September 1987 to August 1988.
28. Principal Investigator, "Knowledge Based Systems in the Microelectronics Production Environment," \$52,408, Harris Corporation, Melbourne, Florida, September 1986 to May 1988.
29. Principal Investigator, "COMPASS Expert System Prototype Demonstration," \$101,868, GTE Data Services, Tampa, Florida, September 1985 to December 1988.

30. Principal Investigator, "Development of an Expert System to Aid Production Planning in the P-Diffusion Area," \$43,934, Harris Corporation, Melbourne, Florida, April 1986 to March 1987.
31. Principal Investigator, "Knowledge Based Systems in the Microelectronics Production Environment," \$28,738, Center for Microelectronic Design and Test, University of South Florida, Tampa, Florida, December 1986 to December 1987.
32. Principal Investigator, "Expert Systems Methodology," \$6,500, GTE Data Services, Tampa, Florida, December 1986 to August 1988.
33. Principal Investigator, "University-Industrial Linkage Grant," \$8,047, Division of Sponsored Research, University of South Florida, April 1986 to March 1987.
34. Principal Investigator, "Installation, Testing and Development of Basic Tools for a Computer Vision Laboratory," \$2,660, College of Engineering, University of South Florida, September-December 1984.

PATENTS

U.S. Patent # 9,130,995 – System and Method for Rendering a Distributed Location-Aware System – September, 2015.

U.S. Patent # 9,047,384 – System and Method for Automatically Determining Purpose Information for Travel Behavior – June 2015

U.S. Patent # 8,924,536 – Distributed and Decentralized Location Aware Architecture – December 2014

U.S. Patent # 8,843,315 – System and Method for Spatial Point-of-Interest Generation and Automated Trip Segmentation Using Location Data – September 2014

U.S. Patent # 8,751,162 – System for Pattern Recognition in Real-time Location-based Services Applications – June 2014

U.S. Patent # 8,725,831 – Architecture and Two-Layered Protocol for Real-Time Location-Aware Applications – May 2014

U.S. Patent # 8,718,671 – Adaptive Location Data Buffering for Location-Aware Applications – May 2014

U.S. Patent # 8,600,674 – Using Pattern Recognition in Real-time LBS Applications – December 2013

U.S. Patent # 8,548,724 – System and Method for Real-time Travel Path Prediction and Automated Incident Alerts – October 2013

U.S. Patent # 8,249,807 – Method for Determining Critical Points in Location Data Generated by Location-Based Applications – August 2012

U.S. Patent # 8,169,342 – Method of Providing a Destination Alert to a Transit System Rider – May 2012

U.S. Patent # 8,145,183 – On-Demand Emergency Notification System using GPS-equipped Devices – March 2012

U.S. Patent # 8,138,907 – Travel Assistant Device – March 2012

U.S. Patent #8,140,256 – Dynamic Ridematching Algorithm. March 2012

U.S. Patent # 8,045,954 – Wireless Emergency-Reporting System – October 2011

U.S. Patent # 8,036,679 – Optimizing performance of location-aware applications using state machines – October 2011

PUBLICATIONS

K. Christensen, R. Perez, P. Panta, and P. Bedarahally, “Unifying Program-Level ABET Assessment Data Collection, Analysis, and Presentation,” *Proceedings of ASEE/IEEE Frontiers in Education Conference*, pp. S1B1-S1B6, October 2011.

Sean J. Barbeau, Rafael A. Perez, Miguel A. Labrador, Alfredo J. Perez, Philip L. Winters, Nevine Labib Georggi, "A Location-Aware Framework for Intelligent Real-Time Mobile Applications," *IEEE Pervasive Computing*, vol. 10, no. 3, pp. 58-67, July-Sept. 2011, doi:10.1109/MPRV.2010.48

Paola A. Gonzalez, Jeremy S. Weinstein, Sean J. Barbeau, Miguel A. Labrador, Philip L. Winters, Nevine L. Georggi, Rafael A. Perez. “Automating Mode Detection for Travel Behavior Analysis by Using GPS-enabled Mobile Phones and Neural Networks,” *Institution of Engineering and Technology (IET) Intelligent Transportation Systems*, 2010, Vol. 4, Iss. 1, pp. 37–49. doi: 10.1049/iet-its.2009.0029. © The Institution of Engineering and Technology 2010.

Sean J. Barbeau, Miguel A. Labrador, Nevine L. Georggi, Philip L. Winters, Rafael A. Perez. “The Travel Assistance Device: Utilizing GPS-enabled Mobile Phones to Aid Transit Riders with Special Needs,” *Institution of Engineering and Technology (IET) Intelligent Transportation Systems*, 2010, Vol. 4, Iss. 1, pp. 12–23. doi: 10.1049/iet-its.2009.0028. © The Institution of Engineering and Technology 2010.

Miguel Labrador, Sean J. Barbeau, Philip Winters, Nevine Georggi, Rafael Perez. "The Travel Assistant Device: Utilizing GPS-Enabled Mobile Phones to Aid Transit Riders with Special Needs," *Urban Cognitive Accessibility 2009*, ONCE Foundation for Cooperation and Social Integration of People with Disabilities, Madrid, Spain. May 12, 2009.

Sean J. Barbeau, Miguel A. Labrador, Nevine L. Georggi, Philip L. Winters, Rafael A. Perez. "TRAC-IT: A Software Architecture Supporting Simultaneous Travel Behavior Data Collection and Real-Time Location-Based Services for GPS-Enabled Mobile Phones," *Proceedings of the National Academy of Sciences' Transportation Research Board 88th Annual Meeting*, Paper #09-3175. January, 2009.

Cesar D. Guerrero, Miguel A. Labrador and Rafael Perez, "CSTEP: Transferring Computer Science Community College Students to Four-year Universities", *Proceedings of ASEE 2009*, June 2009.

Sean Barbeau, Miguel A. Labrador, Philip Winters, Rafael Perez and Nevine Labib Georggi, "Location API 2.0 for J2ME – A New Standard in Location for Java-enabled Mobile Phones", *Computer Communications Journal*, Elsevier, Vol. 31, No. 6, pp. 1091-1103, April 2008.

Paola A. Gonzalez, Jeremy S. Weinstein, Sean J. Barbeau, Miguel A. Labrador, Phillip L. Winters, Nevine Labib Georggi, and Rafael Perez, "Automatic Mode Detection using Neural Networks and Assisted GPS Data Collected using GPS-enabled Mobile Phones," 15th World Congress on Intelligent Transport Systems (ITS WC) 2008, November 2008.

Sean J. Barbeau, Miguel A. Labrador, Philip L. Winters, Rafael Perez, and Nevine Labib Georggi. "Trac-It - A 'Smart' User Interface For A Real-Time, Location-Aware, Multimodal Transportation Survey," 15th World Congress on Intelligent Transport Systems (ITS WC) 2008, November 2008.

Narin Persad-Maharaj, Sean J. Barbeau, Miguel A. Labrador, Phillip L. Winters, Rafael Pérez, and Nevine Labib Georggi, "Real-time Travel Path Prediction using GPS-enabled Mobile Phones," 15th World Congress on Intelligent Transport Systems (ITS WC) 2008, November 2008.

Sean J. Barbeau, Phillip L. Winters, Nevine L. Georggi, Miguel A. Labrador, and Rafael Perez, "The Travel Assistant Device: Utilizing GPS-Enabled Mobile Phones to Aid Transit Riders with Special Needs," 15th World Congress on Intelligent Transport Systems (ITS WC) 2008, November 2008.

Sean J. Barbeau, Miguel A. Labrador, Alfredo Perez, Phillip L. Winters, Nevine L. Georggi, David Aguilar, and Rafael Perez, “Dynamic Management of Real-Time Location Data on GPS-enabled Mobile Phones,” UBICOMM 2008, September-October 2008.

Cesar D. Guerrero, Miguel A. Labrador, and Rafael A. Perez, “REU Sites: Much More than a Research Experience for Undergraduates”, Proceedings of ASEE Annual Conference and Exposition, March 2008.

Sean Barbeau, Phillip Winters, Nevine Georggi, Miguel A. Labrador, Rafael Perez, William Kearns and Jim Fozard, “The Travel Assistant Device: Electronic Mobility and Transportation Guidance Assistance for Persons with Cognitive Disabilities”, Proceedings of University of Rochester & Microsoft Research Workshop on Intelligent Systems for Assisted Cognition, pp. 193-207, October 12-13, 2007.

Cesar D. Guerrero, Miguel A. Labrador and Rafael Perez, “Enhancing the Global Perspective of REU Site Students”, Proceedings of ASEE 2007, June 2007.

David P. Aguilar, Sean J. Barbeau, Rafael A. Perez, Miguel A. Labrador, and Philip L. Winters, “A Comparison of Fix Times and Estimated Accuracies in Application Programming Interfaces (APIs) for GPS-Enabled Mobile Phones”, Proceedings of the 11th World Conference on Transport Research, University of California, Berkeley, June 2007.

Cesar D. Guerrero, Miguel A. Labrador and Rafael Perez, “Graduate Students Mentoring in REU Sites”, Proceedings of ASEE SE 2007, April 2007.

Aguilar, David P., Barbeau, Sean, Labrador, Miguel A., Perez, Alfredo J., Perez, R.A., Winters, P.L. "Quantifying Position Accuracy of Real-Time, Multimodal Transportation Behavior Data Collected Using GPS-Enabled Mobile Phones" Transportation Research Record: Journal of the Transportation Research Board 2007.

Cesar D. Guerrero, Miguel A. Labrador and Rafael Perez, “Enhancing the Global Perspective of REU Site Students”, *Proceedings of 2007 ASEE Annual Conference Honolulu Hawaii*, June 24 – 27 2007.

Cesar D. Guerrero, Miguel A. Labrador and Rafael Perez, “Graduate Students Mentoring in REU Sites”, *Proceedings of ASEE SE 2007*, April 2007.

Miguel A. Labrador and Rafael A. Perez. “Increasing the Participation of Under-represented Minority Student Groups in Computer Science and Engineering: An REU Site Experience.” Proceedings of *Frontiers in Education 2006*, October 2006.

Sean Barbeau, Miguel A. Labrador, Philip Winters, Rafael Perez and Nevine Labib Georggi, "A General Architecture in Support of Interactive, Multimedia, Location-based Mobile Applications", *IEEE Communications Magazine*, Vol. 44, No. 11, pp. 156-163, November 2006.

Miguel A. Labrador and Rafael A. Perez. "Fulfilling Mentors' Expectations: An REU Site Experience." In Proceedings of *ASEE-SE 2006* Conference, April 2006.

Winters, P., Perez, R.A., Joshi, A. Perone, J." Worksite Trip Reduction Model and Manual" Transportation Research Board 84th Annual Meeting, 2005 Compendium of Papers, Washington DC.

Aldawoodi, N., Perez,R. A., "Advanced Formula Prediction using Simulated Annealing", Proceedings of Genetic and Evolutionary Conference 2004, Seattle, Washington, June 2004

Aldawoodi, N., Perez,R.A., Alvis, W., Valavanis, K. "Developing Automated Helicopter Models Using Simulated Annealing and Genetic Search", Proceedings of Genetic and Evolutionary Conference 2004, Seattle, Washington, June 2004

Aldawoodi, N., Perez,R.A., "Formula Prediction Using Genetic Algorithms", Proceedings of Genetic and Evolutionary Conference 2003, Chicago, Illinois, July 12-16, 2003

Smith, K., Perez,R.A., "'Locating partial discharges in a power generating system using neural networks and wavelets" Proceedings of IEEE Conference on Electrical Insulation and Dielectric Phenomena, Cancun, Mexico, October 20-24, 2002

Perez, R.A., "Radial Basis Function Network for Predicting Impact of Trip Reduction Strategies" Proceedings of Centro Latinoamericano de Estudios en Informática (CLEI2000) Conference, Mexico City, Sept 18 - 22, 2000.

Winters, P., Leland, F., Pietrzyk, M., Perez, R.A., " Predicting Change in Average Vehicle Ridership On the Basis of Employer Trip Reduction Plans" Transportation Research Record: Journal of the Transportation Research Board #1682.

Colmenares, G., Perez, R.A. "A Reliable Method to Reduce Observations and Variables When Building Neural Network Models " Proceedings of the IV Congreso Interamericano de Computacion Aplicada a la Industria de Proceso, San Jose, Costa Rica, Nov 2 - 5, 1999.

Christensen, K., Callahan, A., Perez, R., "Web Publishing in a First Year Foundations of Engineering Course" 1999 ASEE Southeastern Section Conference.

Colmenares, G., Perez, R.A. "A Data Reduction Method to Train, Test, and Validate Neural Networks" Proceedings of IEEE Southeastcon '98, Orlando, Florida, April 24 - 26, 1998.

Chung, S. W., Perez, R. A., "Why is Problem-Dependent and High-Level Representation Scheme Better in a Genetic Algorithm", Proceedings of the 1997 ACM Symposium On Applied Computing, San Jose, California, Feb 28 - March 2, 1997.

Pietrzyk, M., Perez, R.A., "Solving Transportation Problems With Artificial Neural Networks" Proceedings of the 3rd Annual World Congress on Intelligent Transportation Systems, Orlando,

Florida, October 14 to 18, 1996.

Perez, R.A., Pietrzyk, M., "A Neural Network Approach to the Development of Trip Reduction Plans for Employers" Proceedings of the Neural Network Applications in Highway and Vehicle Engineering. Washington D.C., April 10-11, 1996

Bedarahally, P., Perez, R. A., Chung, S. W., "A Family Elitist Approach in Genetic Algorithms", Proceedings of the ACM 11th Annual Symposium On Applied Computing, Philadelphia, PA, Feb 18 - 20, 1996.

Chung, S. W., Perez, R. A., "A New Markov Chain Analysis for a GA Using Symbolic Representation", Proceedings of the IEEE International Conference on Evolutionary Computing, Perth, Australia, Nov 29 - Dec 1, 1995

Chung, S. W., Perez, R. A. "Novel Markov Chain Models for Genetic Algorithms Using Different Representation Schemes", Proceedings of the Artificial Neural Networks in Engineering Conference, St. Louis, Missouri, Nov 12-15, 1995

Chung, S. W., Perez, R. A., and Garcia, O. N. "How Schemata Affect Genetic Algorithm Search", Proceedings of the Artificial Neural Networks in Engineering Conference, Rolla, Missouri, Nov 13-16, 1994

Chung, S. W., Perez, R. A., "The Schema Theorem Considered Insufficient", Proceedings of the Sixth IEEE International Conference on Tools with Artificial Intelligence, New Orleans, Nov 6-9, 1994, PP 748-751

Perez, R.A., Lilkendey, J. T., Koh, S. "Machine Learning for a Dynamic Manufacturing Environment" ACM SIGICE Quarterly, Feb 1994.

Perez, R.A., Koh, S. "Integrating Expert Systems With a Relational Database in Semiconductor Manufacturing" IEEE Transactions in Semiconductor Manufacturing, Vol. 6, No. 3, August 1993.

Perez, R.A., Hall, L.O., Romaniuk, S.G., Lilkendey, J. "Evaluation of Machine Learning Tools Using Real Manufacturing Data" International Journal of Expert Systems: Research & Applications, Vol. 5, No.4, PP 299-317, July 1993.

Garcia, O.N., Perez, R.A., Silverman, G., "On Teaching AI and Expert Systems Courses" IEEE Transactions on Education, Vol. 36, No. 1, February 1993.

Okogbaa, O. G., Perez, R.A., Huan, J., Albino, V. "A Framework for Integrated Reliability and Maintenance Decision Support for Flexible Automated Production Systems" First Africa-USA Intl. Conference on Manufacturing Technology, Jan 11-14, 1993 Lagos, Nigeria

Perez, R.A., Hall, L.O., Romaniuk, S.G., Lilkendey, J. "Inductive Learning for Expert Systems in Manufacturing" 25th Hawaii Intl. Conference on System Sciences Jan 7-10, 1992

Hall, L. O. and Perez, R.A., "A study of Induction for Knowledge Acquisition in a Manufacturing Environment", Machine Learning Workshop, Evanston, Ill. June 1991.

Victor, P.J., Romaniuk, S.G., Hall, L.O., Perez, R.A., Koh, S., and Djeu, P.P., "Evaluation of

Some Inductive Algorithms for Automatic Knowledge Acquisition,” PROCIEEM ‘90, Tampa, November.

Sarmiento, C.D. and Perez, R.A. “Position Paper on the Development of Knowledge-Based Systems”, AAAI-90, Boston, MA, August, 1990.

Perez, R.A., Sarmiento, C.D., Victor, P.J. and Koh, S. “A Modular Expert System Design for Diagnosing Semiconductor Wafers,” International Conference on Expert Systems and Their Applications, Avignon, France, May 28-June 1, 1990.

Victor, P.J., Koh, S. and Perez, R.A. “A Modular Expert System Design for Wafer Diagnosis”, Second Annual Florida Microelectronics Conference, Melbourne, Florida, May 10-11, 1990.

Savell, D., Perez, R.A. and Koh, S. “Scheduling Semiconductor Wafer Production: An Expert System Implementation”, IEEE Expert, Fall 1989.

Sarmiento, C.D., Perez, R.A., and Babcock, M. “A Wafer Diagnosis Expert System for Semiconductor Manufacturing using KEE and Ingres,” IASTED International Conference on Expert Systems, Zurich, Switzerland, June 26-28, 1989.

Perez, R.A., Babcock, M., Sarmiento, C.D. and Joyce, R.J., “An Expert System to Help Diagnose CMOS Wafer Failures,” Florida Microelectronics Conference, Boca Raton, Florida, May 10-11, 1989.

Joyce, R.J., Perez, R.A. and Sarmiento, C.D. “Development of a Knowledge Based System for CMOS Parametric Failure Analysis,” Semiconductor Materials International Conference, Albuquerque, New Mexico, April 13 - 14, 1989.

Perez, R.A., and Koutsorelis, D. “A Command Language for Multiple Robot Arm Coordination,” IEEE Transactions on Education, Vol. E-30, No. 2, pp. 109-112, May 1987.

Perez, R.A., “Robot Intelligence and Computer Vision Research Laboratory at USF,” Proceedings of the twenty-fourth Annual Southeast Regional Conference of the ACM, Tampa, Florida, April 13-15, 1986.

Perez, R.A., and Varanasi, M. “A Laboratory Environment for Robotics and Vision Research,” International Conference on Robotics and Factories of the Future, Charlotte, NC, December 4-7, 1984.

Perez, R.A., and Li, C.C. “Sensitivity Reduction of a Class of Zero-Sum Two-Player Linear Deterministic Differential Games,” Proceedings of the 1975 IEEE Conference on Decision and Control, Houston, Texas, December 1975.

Perez, R.A., and Li, C.C. “Automated Collection and Reporting of Medical Data,” IEEE Systems, Man and Cybernetics 1974 Conference, Dallas, Texas, October 1974.

Einolf, C.W., Spicher, J.L., Evans, J.M., Perez, R.A., “Physician Manpower Planning for Ambulatory Health Care Facilities,” Journal of the AAMI, Vol. 7, No. 1, pp. 51-52, 1973.

Einolf, C.W., Spicher, J.L., Evans, J.M., Perez, R.A., “An Approach to the Design of Ambulatory Health Care Facilities,” Biomedical Sciences Instrumentation, Vol. 9, pp. 69-72,

1972.

Perez, R.A., and Li, C.C.”Performance Sensitivity of Linear Quadratic Two-Person Differential Games,” Fifth Annual Princeton Conference on Information Sciences and Systems, March 1971.

Christopherson, E.B., Evans, J.M., Perez, R.A., “Extracorporeal Partial Systemic Venous Shunt,” Vol. XVII, Surgical Forum, 1967.

Technical Reports:

“A Primer on Neural Networks Applications in Transportation” CUTR Technical Report, Fall 1995.

“Automatic Knowledge Acquisition for Expert Systems”, Technical Report for Florida High Tech Council Grant, July 1993.

“Automatic Knowledge Acquisition for Expert Systems”, Technical Report for Florida High Tech Council Grant, December 1991.

“Automatic Knowledge Acquisition for Expert Systems”, Technical Report for Florida High Tech Council Grant, December 1990.

“Enhancements to Harris CMOS Wafer Failure Analysis Expert System,” Technical Report for Harris Research Grant, January, 1989.

“An Expert System Implementation for CMOS Wafer Failure Analysis at Sample Probe,” Technical Report for Harris Research Grant, August 1988.

“An Expert System Implementation for Wafer Scheduling,” Technical Report for Harris Research Grant, April 1987.

“Selecting Development Software for an Expert System in Harris Analog Wafer Fab,” Technical Report for Harris Research Grant, August 1986.