CURRICULUM VITA

BIOGRAPHICAL DATA

• Name: LUIS. C. RABELO

Education

Dual M.S. Management and Engineering, emphasis: Systems Dynamics, Systems Engineering, Technology Strategies Dual Degree from the School of Engineering and the Sloan School of Management Massachusetts Institute of Technology, Cambridge, MA GPA 5.0/5.0 February 2001

Thesis: "What "Intelligent Agent" is Smarter in Business to Consumer eCommerce?"

Ph.D. Engineering Management, emphasis: Artificial Intelligence (Neural Networks/Knowledge Based Systems Hybrids) University of Missouri, Rolla, MO GPA 4.0/4.0 1990

Dissertation: A Hybrid Artificial Neural Networks and Knowledge-Based Expert Systems Approach to FMS Scheduling

M.S. Engineering Management, emphasis: Manufacturing Control, Theory of Constraints & JIT, and Business Functions University of Missouri, Rolla, MO GPA 4.0/4.0 1988

M.S. Electrical Engineering, emphasis: Computer Engineering, Digital Control, Artificial Intelligence

Florida Institute of Technology, Melbourne, FL GPA 3.94/4.0 1987

Thesis: "Simulation and Design of a Multiprocessor System for Signal Processing"

B.S. Electrical Engineering and Mechanical Engineering, emphasis: Power and Control Engineering Technological University of Panama, Panama 1983 (**Top 5%**)

Positions

UNIVERSITY OF CENTRAL FLORIDA - Orlando, FL

2001 - present

State institution with education and research emphasis (60,000 students)

Associate Professor (Tenured in 2006)

- Taught and organized courses in Information Technologies, Manufacturing Technologies, Engineering Management, Artificial Intelligence, Decision Analysis, Statistics and Probabilities, Project Management, Advanced Simulation, Operations Engineering, Production and Inventory Control, Cost Engineering, Advanced Engineering Economics, Environment of Technical Organizations
- Coordinated research involving 17 MS and 35 Ph.D. Students.
- Wrote research proposals to Government and Industry and received over \$3,683,000 in research funding as PI and Co-PI.
- Attended conferences and submitted papers to proceedings and professional journals.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) - Kennedy Space Center NASA Project Manager (Agency Level) (Intergovernmental Personnel Act Assignment)

- Project Manager in charge/administration of a budget of \$25Million/year, and a \$130 Million Portfolio of 88 Current Research Projects and 27 "Fellowships and Engineering Networking" Projects being executed by more than 50 US Universities in partnerships with several NASA Centers and Laboratories. These projects are in the most advanced areas in Science, Technology, Engineering, and Mathematics.
 - Exploration: Nanomaterials (plasmonic, etc.), Adaptive Antennas, Advance Hybrid Simulation, Advanced Robotics, New Algorithms for Image Compression, Artificial Intelligence, Propulsion Technologies, Nuclear and Plasma Systems, Nanostructured Solar Cells.

- o Science: Carbon Cycles Studies, Global Climate Changes, Remote Sensing of the Earth, Characterization of Life under extreme environments, Remote Sensing of Bio-Diversity, Exo-planets, Blackholes and Ouasars
- o Space Operations: Cube and Nano Satellites, Design of Cube-Racks and Mini-Labs for the International Space Station, Sensor and Health Monitoring of Space Transportation Systems, Advanced Supply Chain using RFID
- o Aeronautics Research: Next Generation, New Materials for Hypersonic Systems, Advanced Composite Materials Manufacturing, Green Aviation, High Temperature Shape Memory Alloys.
- Effectively communicate, collaborate, and coordinate with Program Manager at NASA Headquarters.
- Strategic planning and project management execution in the NASA Office of Education.
- Collaboration and Coordination with the four NASA Mission Directorates, the Office of the Chief Technologist, and the ten NASA Centers to elaborate and execute Research Plans
- Implement, manage, and assess the research projects to ensure that project objectives and intended outcomes are achieved.
- Review, approve, and submit all reports negotiated with NASA Headquarters, including weekly, monthly, and 90-day progress and activity reports.
- Work in partnership with support services personnel to assure prompt, complete input of data into NASA's tracking, reporting, and evaluation systems to facilitate program/project evaluation and assessment.
- Represent NASA: Support US Congress Inquiries
- Representative from NASA for the White House Initiatives for Minority Institutions (Higher Ed)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) - Kennedy Space Center 2002 – 2005, 2008 NASA Fellow and Intern

- Selected from a Nationwide search
- Support to the Tiger Team/Problem Resolution Team (Nationwide) of the Thermal Protection System (TPS) of the Space Transportation System (STS) NASA Shuttles (Discovery, Atlantis, Endeavour)) Kennedy Space Center.
- System Architect to specify collaborative computing environment architecture. The architecture is a technological platform where heterogeneous models can be hosted to produce virtual environments such as a Virtual Range and a Virtual Spaceport.
- Extensive work in simulation and information technologies with the NASA Ames Research Center (ARC), NASA Johnson Space Center (JSC), and Kennedy Space Center (KSC).

HONEYWELL INTERNATIONAL - Minneapolis, MN

1999 - 2001

\$25 billion global diversified company with 120,000 employees

Senior Principal Research Scientist – Honeywell Technology Center, Enterprise Optimization Group Manager.

Applied advanced scientific and engineering principles, theories and concepts in R&D programs and business development.

- Technology Strategist: Accelerated Growth Initiative, Technology Platforms Roadmaps, eCommerce Committee.
- Program Manager in a project in Optimal Design of Policies for Supply Chain Management.
- Program Manager in projects related to enterprise optimization.
- Principal investigator in a project in Enterprise Optimization project, Supply Chain Management, Technology Strategies.
- Introduced companies and partners to our group to participate in several DARPA proposals in Agents, Heterogeneous Network (Internet, Wireless, Satellite) Simulation, Ontologies for Bioterrorism, and knowledge management.
- Corporate liaison to Search Committees, projects with other companies, government agencies, and special funding.

B.F. GOODRICH - Brecksville, OH

1996 – 1999

\$4 billion global aerospace and specialty chemicals company with 18,000 employees

Research and Development Associate – Process Technology Group of Performance Materials (1998-1999)

Applied advanced scientific and engineering principles, theories and concepts in developing research and development programs.

- Task leader who completed the plans to implement and scale-up an intelligent control system using AI technologies for composite materials in an industrial facility.
- Proposed, planned, and coordinated an Intelligent Control System project to reduce costs, increase product consistency, and reduce cycle time.
- Introduced AI technologies in several groups of BFG Aerospace and advised several projects related to AI in the Wheels & Brakes Group and the Aerospace Sensors Division.
- Received a promotion 3 years ahead of schedule.

Senior Research and Development Engineer, Advanced Technology Group (1996-1998)

Applied working knowledge of several disciplines to solve complex problems where little or no precedence existed.

- Developed and implemented an intelligent control system using AI technologies (Blackboard Systems using G2 from Gensym Corporation, Neural Networks, Fuzzy Logic using Matlab, Machine Learning, Probabilistic Search) for composite materials manufacturing (Batch Process) in a pilot plant Task Leader (with BFGoodrich Aerospace).
- Designed and implemented an optimization engine for sensor/data fusion using advanced algorithms programmed in C++ and interfaced (using UNIX sockets) to a commercial CAD system Task Leader with BFGoodrich Aerospace.
- Generated and initiated the concept of sensor/data fusion for a new product development program in Aerospace.
- Liaison to Search Committees, projects with other companies, and government agencies (NIST-NAVY).

OHIO UNIVERSITY - Athens, OH

1991 - 1996

Land-grant state institution with education and research emphasis (20,000 students)

Associate and Tenured Professor (1995 - 1996)

• *Received promotion and Tenured* ahead of schedule.

Assistant Professor, Department of Industrial and Systems Engineering (early tenured) (1991-1995)

- Taught and organized courses in Artificial Intelligence, Neural Networks, Production Management, Neural Networks and Operations Research.
- Coordinated research and directed 18 MS.
- Wrote research proposals to Government and Industry and received over \$250,000 in research funding as PI and Co-PI.
- Attended conferences and submitted papers to proceedings and professional journals.
- Designated journal editor, member of the program committee of several conferences, and chairperson of several sessions.

AMP - Harrisburg, PA 1994 - 1996

\$5.6 billion global leader of electrical and electronic connectors with 40,000 employees

Consultant, Advanced Manufacturing Technologies Group

- Accomplished the development of a knowledge-based system to schedule an "advanced" factory for electronic connectors using Artificial Intelligence in collaboration with **Alan Pristker**.
- Recommended a production control system (based on computer simulations) for a new factory (Hyundai) in Korea.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Gaithersburg, MA

1991 - 1996

Technology unit of the US Department of Commerce

Guest Researcher, Advanced Manufacturing Research Facility (AMRF) and Fellow

- Demonstrated concepts of the "Virtual Factory" by using 3D animations, discrete-event simulations, databases, control theory, industrial scheduling software packages, and models of industrial production facilities.
- Performed research based on the integration of neural networks, genetic algorithms, and machine learning for hierarchical manufacturing control in the AMRF

UNIVERSITY OF MISSOURI - Rolla, MO

1990 - 1991

State institution with engineering education and research emphasis (6,000 students)

Post-Doctoral Fellow, Nuclear Engineering Department and Intelligent Systems Center

- Designed and programmed architecture for sensor signal analysis by neural networks and time series for surveillance in "fast" nuclear reactors.
- Counseled in the development of a predictive system for the customer retention problem using neural networks (sponsored and deployed for a US Organization).

CONTADORA CORPORATION - Panama, Panama

1981 - 1985

Consortium located in the Republic of Panama with Hotels and Commuter Airlines

Operations Manager (1983-1985)

Administered engineering services involving management (Engineering Management) of a group of 55 employees (<u>I was just a 23 years old engineer!</u>).

Operations Analyst at Corporate Level (1982-1983)

Coordinated engineering projects between the headquarters and the subsidiaries. **Promoted ahead of schedule**.

Maintenance Engineer (1981-1982)

Conducted quality control and trend-monitoring tests of turbo-prop and jet engines.

• Developed an optimization/scheduling system using the Newton Raphson numerical technique that improved the ratio of cycles/hours to reduce costs in over/haul of turbo-prop engines (savings around \$250,000.00 in the first two years).

TECHNOLOGICAL UNIVERSITY OF PANAMA – Panama City, Republic of Panama

1980 - 1982

Land-grant state institution with engineering education and research emphasis (17,000 students)

Teaching Assistant, College of Electrical Engineering

- Grade homework and exams for several courses such as: Electromagnetic Fields, Network Theory, Introduction to Engineering.
- Taught basic laboratory courses in Electrical Engineering.

TEACHING

LIST OF COURSES – 2005-2008, 2008 (SABBATICAL), 2009-2011 (NASA IPA), 2011-2012

Course Number	Course Title	Credits	Class	Semester	# of Students	Course Evaluation Summary (Q16) % of Students with Excellent and Very Good Overall Assessment of Instructor (Sample)	Comment
EIN6908	Independent Study	3	Grad	Spring 2013	2		
EIN6908	Independent Study	3	Grad	Fall 2009	1		NASA IPA
EIN7919	Research	3	Grad	Fall 2009	1		NASA IPA
EIN7980	Dissertation	9	Grad	Fall 2009	2		NASA IPA
EIN6918	Directed Research	3	Grad	Summer 2009	2		NASA IPA
EIN7919	Research	3	Grad	Summer 2009	1		NASA IPA
EIN7980	Dissertation	3	Grad	Summer 2009	1		NASA IPA
EIN7919	Research	3	Grad	Spring 2009	3		Sabbatical/ Fulbright Scholar
EIN7980	Dissertation	6	Grad	Spring 2009	1		Sabbatical/ Fulbright Scholar
EIN7919	Research	3	Grad	Fall 2008	4		Sabbatical/ Fulbright Scholar
EIN7980	Dissertation	9	Grad	Fall 2008	1		Sabbatical/ Fulbright Scholar
EIN5108	Environ. Of Technical Org.	3	Grad/ Under	Summer 2008	39	80%	
EIN7980	Dissertation	3	Grad	Summer 2008	1		
EIN5392C	Manufac. Syst. Eng.	3	Grad/ Und	Spring 2008	5	100%	
EIN7919	Research	3	Grad	Spring 2008	4		
EIN7980	Dissertation	3	Grad	Spring 2008	2		
EIN5108	Environ. Of Technical Org.	3	Grad/ Und	Fall 2007	37	84%	
EIN5907	Independent Study	3	Grad	Fall 2007	1		
EIN7919	Research	3	Grad	Fall 2007	2		
EIN7980	Dissertation	6	Grad	Fall 2007	4		
EIN6339	Operations	3	Grad	Spring	22	64%	

	Engineering			2007			
EIN7919	Research	3	Grad	Spring 2007	3		
EIN7980	Dissertation	3	Grad	Spring 2007	4		
EIN6339	Operations Engineering	3	Grad	Fall 2006	8		
EIN7919	Research	3	Grad	Fall 2006	4		
EIN7980	Dissertation	6	Grad	Fall 2006	5		
EIN5117	Mgt. Info. Systems	3	Grad/ Und	Summer 2006	12		
EIN7919	Research	3	Grad	Summer 2006	2		
EIN7980	Dissertation	6	Grad	Summer 2006	5		
EIN5117	Mgt. Info. Systems	3	Grad	Spring 2006	10	50%	
EIN7919	Research	3	Grad	Spring 2006	2		
EIN7980	Dissertation	6	Grad	Spring 2006	5		
EIN6339	Operations Engineering	3	Grad	Fall 2005	10	86%	
EIN7919	Research	3	Grad	Fall 2005	4		
EIN7980	Dissertation	9	Grad	Fall 2005	5		
EIN5117	Mgt. Info. Systems	3	Grad/ Und	Summer 2005	19	95%	
EIN6971	Independ. Study	3	Grad	Summer 2005	3		
EIN7919	Research	3	Grad	Summer 2005	2		
EIN7980	Dissertation	6	Grad	Summer 2005	5		
EIN5117	Mgt. Info. Systems	3	Grad/ Und	Spring 2005	37	93%	
EIN6971	Independ. Study	3	Grad	Spring 2005	2		
EIN7919	Research	3	Grad	Spring 2005	2		
EIN7980	Dissertation	9	Grad	Spring 2005	6		

HONOR THESES SUPERVISION (ADVISOR) – UNDERGRADUATE HONOR

Student's Name	Honor Thesis Title	Current Status	Expected Defense	Other Comments
			Term	
Menicke, M	Simulation and	Defended Spring	Completed	Main Advisor
	Interpretation of Traffic	2003		
	Information			

Trinh, V.	Using VoiceXML to Provide	Defended Fall 2002	Completed	Main Advisor
	Real-Time Traffic	Supported by NASA		This Honor thesis
	Information	Grants		got the prize as the
				best Honor Thesis
				in the University of
				Central Florida
				<u>2003.</u>

PH.D. DISSERTATION SUPERVISION (MAIN ADVISOR AND CO-ADVISOR)

Student's Name	Dissertation Title/Topic	Current Status And Support Information	Expected Defense Term and Current Position (if Completed)	Other Comments
Bhide, S.	Utilization of a New Agent Formalism for Supply Chain Circles	Starting IEMS/ADD Korea	Fall 2015	Main Advisor
Nagadi, K.	Framework to Generate Advance Manufacturing Configurations Using Agents and Genetic Optimization	Fourth Semester	Summer 2015	Main Advisor
Lowe, L.	Distributed Simulation and Gaming	Third Semester Cubic Systems	Spring 2015	Main Advisor
Sola, E.	Distributed Simulation and Optimization in Nanotechnologies	Third Semester Siemens Corporation	Summer 2015	Main Advisor
Cortez, E.	Health Monitoring of Space Exploration Missions and WARP/Distributed Simulation	Passed Qualifier NASA	Fall 2014	Main Advisor
Ductzack, M.	Hybrid Real Options to Design Space Exploration Missions	Passed Qualifier NASA	Spring 2015	Main Advisor
Joledo, O.	Business Model Simulation Using Agents: A Social Lending Case Study	Passed Qualifier IEMS/ADD Korea	Fall 2014	Main Advisor
Conner, A.	Selection of Team Members for High Performance Teams	Passed Qualifier NASA/U. of Hawaii	Fall 2014	Main Advisor
Landsberger, M.	A Framework for Green Global Supply Chain Management	Passed Qualifier ScreenWorks	Fall 2014	Main Advisor
Stuart, L.	Innovation Economics and Smart Grids	Passed Qualifier Duke Energy	Spring 2015	Main Advisor
Pastrana, J	A Framework for Evolving Adaptive Supply Chain Management based on the Technology Adoption	Passed Candidacy UCF IST/DoD VA SimLearn	Summer 2014	Main Advisor

	Lifecycle			
Elattar, A.	A Holistic Framework for	Defended Fall	Completed	Main Advisor
	Transitional Management	2013		
		Supported by several	Senior Product Manager	
		Grants	- Symantec Corporation	
Onkham, W.	A Real Option Dynamic	Defended Fall	Completed	Main Advisor
	Decision (RODD)	2013		
	Framework for Operational	G 4.11		
	Innovations	Supported by several		
Od-L V	M	Grants	Completed	Main Advisor
Odeh, K.	Measuring Innovation from	Defended Summer 2013	Completed	Main Advisor
	the Systems Engineering Viewpoint in the Defense	2013	Dinastan Systems	
	Organization	Supported by several	Director Systems Engineering – Lockheed	
	Organization	Grants-Lokheed	Martin Corporation	
		Martin	Martin Corporation	
Cintron, J.	Framework for Measuring	Defended Fall	Completed	Main Advisor
Ciliuon, J.	the Value-Added of	2013	Completed	Maiii Advisoi
	Knowledge Processes with	2013	Director Quality Systems	
	Analysis of Process	Supported by several	- Lockheed Martin	
	Interactions and Dynamics	Grants-Lokheed	Corporation	
	interactions and Dynamics	Martin	Corporation	
Sarmiento, A.	A Methodology for	Defended Spring	Completed	Main Advisor
24111101110,111	Stabilizing Supply Chains	2010		1,14111 114 (1501
	Sant J		Senior Consultant at MIT	
		Supported by several	Logistics (Logica) and	
		Grants	Professor at UniSabana	
Helal, M.	Enterprise Simulation Using	Defended Summer	Completed	Main Advisor
	System Dynamics and DES	2008	Professor at Alexandria	
			University, Egipt	
Alvarado, K.	Integration of SCOR and	Defended Spring 2008	Completed	Main Advisor
	MOC for Business Re-			
	engineering Projects in IT	Supported by NASA	Dean at Daytona State	
		Grants provided to	University	
		Dr. Luis Rabelo		
Sala-Diakanda, S.	Information Fusion for	Defended Spring 2007	Completed	Main Advisor
	Toxicity, Blast, and Debris	Supported by NASA		
	Models	and ONR Grants	Research Professor at	
		provided to Dr. Luis	UCF	
T T	G: 14: O 4 1 · ·	Rabelo	G 14.1	C:
Lee Lacy	Simulation Ontologies using	Defended Fall 2006	Completed	Co-
	OWL		Senior Engineer at DRC	Advisor/Main Advisor: Dr.
			Semor Engineer at DKC	Sepulveda
Quijada, S.	Network Centric Warfare	Defended Summer	Completed	Co-
Zuijaua, 5.	Multi-Methodology	2006	Completed	Advisor/Main
	winn-wemouology	2000	Coronel of the Chilean	Advisor: Dr.
			Army	Sepulveda
			1311113	Soparroda
Munoz, C.	Using Options and Game	Defended Summer	Completed	Main Advisor
, -·	Theory to Justify Utility	2006		
	Computing		Senior Software Manager	
	K 6		at Disney Corporation	
Dawson, J.	A Framework for Usability	Defended Summer	Completed	Main Advisor
*	of Distributed Simulation	2006	_	

	Environments		Senior Safety Engineer at	
		Supported by NASA	NASA	
		Grants provided to Dr. Luis Rabelo		
Yousef, N.	A Framework for Cost	Defended Spring 2006	Completed	Co-Advisor /
	Modeling a Supply Chain	Supported by NASA		Main Advisor:
		Grants Provide to Dr.	Associate Professor	Jose Sepulveda
		Luis Rabelo	Daytona State College	
Rahal, A	A Framework to Measure	Defended Summer	Completed	Main Advisor
	the Impact of a Patent	2005		
		Supported by NSF	Associate Professor at	
		Grant	University of Arkansas	
Fayez, M.	Advanced Supply Chain	Defended Spring 2005	Completed	Co-Advisor /
	Integration System			Main Advisor:
			Director at Productivity	Mansooreh
			APEX	Mollaghasemi
Park, J.	A Framework for	Defended Spring 2005	Completed	Co-Advisor /
	Visualizations using HLA	Supported by NASA		Main Advisor:
		Grants Provided to	Coronel of the South	Jose Sepulveda.
		Dr. Luis Rabelo	Korean Navy	
Meade, P.	Using Chaos and	Defended Summer	Completed	Main Advisor
	Complexity Theory for	2003		
	Strategic New Product	Supported by NASA	Director in Engineering	
	Development	Grants Provided to	at NASA	
		Luis Rabelo		

MS THESES SUPERVISION (MAIN ADVISOR AND CO-ADVISOR)

Observation: It is important to know that after 2005, the MS degree without thesis was reduced from 36 hours (with thesis was 30 hours) to just 30 hours. Therefore, the MS students selecting thesis option have dropped considerably in the IEMS Department.

Student's Name	Dissertation Title	Degree Program	Completion Date	Other Comments
Mendoza, H.	Simulation of a Security Gate System	UMIP	Summer 2014	Main Advisor
	with RFIDs and Artificial	Supported by		
	Intelligence-based Systems	Grants Provided to		
		Dr. Luis Rabelo		
Caceres, R.	Simulation of the Supply Chain of a	UMIP	Summer 2014	Main Advisor
	Multi-Modal System	Supported by		
		Grants provided to		
		Dr. Luis Rabelo		
Walters, J.	Success Factors for Research Grants	UCF Employee	Completed Fall	Main Advisor
	Using System Dynamics		2013	
Rachapalli, D.	XML-Schema and RTI	IEMS	Completed Fall	Main Advisor
		Supported by	2005	
		Grants provided to		
		Dr. Luis Rabelo		
Sieh, R.	Optimization of System Dynamics	IEMS	Completed	Main Advisor
	Models using Genetic Algorithms		Summer 2005	
Paruchuri, A.	SPEEDES: A Case Study in Space	IEMS	Completed	Main Advisor
	Operations	Supported by	Fall 2004	

		Grants Provided to Dr. Luis Rabelo		
Nayaranan, K.	Rollback-able Random Number Generators for the Synchronous Parallel Environment for Emulation and Discrete-Event Simulation (SPEEDES)	IEMS Supported by Granst Provided to Dr. Luis Rabelo	Completed Fall 2004	Main Advisor
Wasadikar, A.	Developing an Object-Oriented Approach for Operations Simulation in SPEEDES	IEMS Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 2004	Main Advisor
Fakir, M.	Ascertaining The Growth Of A Corporation: A System Dynamics Approach	IEMS Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 2004	Main Advisor
Rosales, S.	Study for Development of a Blast Layer for the Virtual Range Project	IEMS	Completed Fall 2004	Co-Advisor / Main Advisor: Jose Sepulveda
Robledo, L.	Analysis and integration of a debris model in the Virtual Range Project	IEMS	Completed Fall 2004	Co-Advisor / Main Advisor: Jose Sepulveda
Gruber, F.	Evolutionary Optimization of Support Vector Machines	IEMS Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 2004	Main Advisor
Alvarado, K.	Roadmap for the Supply Chain Operations Reference Model to Apply It to Service Organizations	IEMS	Completed Summer 2004	Main Advisor
Dhar, A.	Analysis of Oscillation in Supply Chains	IEMS Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 2003	Main Advisor
Shah, A.	Detecting Internal and External Changes in a Supply chain and Predicting Behavior Using Neural Networks	IEMS Supported by Grants Provided to Dr. Luis Rabelo	Completed Summer 2003	Main Advisor
Mehta, M.	Using Recurrent Networks to Generate Process Plans from Experience and GT	ISE	Completed Fall 1997	Main Advisor
Bush, B.	Development of Fuzzy Systems Using Evolutionary Optimization	ISE Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 1996	Main Advisor
Yao, X.	Adaptive Pattern Recognition Scheduling for FMS	ISE Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 1996	Main Advisor
Wongsangwate, P.	Adaptive Dispatching Using Genetic Algorithms and Neural Networks	ISE Supported by Grants Provided to Dr. Luis Rabelo	Completed Fall 1996	Main Advisor
Wilson, D.	Learning Scheduling Rules from Near-Optimal Examples	ISE	Completed Fall 1996	Main Advisor
Uwais, M.	Integrating AHP and Expert Systems for Pharmaceutical Industries	ISE	Completed Summer 1995	Main Advisor

	Portfolio Management			
Toure, S.	Hybrid Approach to the TSP using	ISE	Completed	Main Advisor
	Neural Networks and OR		Spring 1995	
	Techniques			
Onyejekwe, E.	Using Neural Networks for Color	ISE	Completed	Main Advisor
	Error Reduction in Multimedia		Spring 1995	
	Applications			
Hooks, K.	Integration of CAD and CAI Using	ISE	Completed	Main Advisor
	AI		Fall 1994	
Kulak, F.	Development of a Neocognitron	ISE	Completed	Main Advisor
	Simulator for Group Technology		Fall 1994	
II.1 T	Classification	IGE	0 141	Mala Addison
Holter, T.	Design and Development of an	ISE	Completed	Main Advisor
Tsai, J.	Intelligent Manufacturing Controller Genetic Algorithms for Multi-	ICE	Spring 1994 Completed	Main Advisor
1 Sai, J.	Criteria Optimization	ISE	Fall 1993	Maili Advisor
Mannariat, L.	Development of a Feature-Based	ISE	Completed	Main Advisor
Maiillallat, L.	Process Planner: an Industrial Case	ISE	Fall 1993	Maiii Auvisoi
	Study		Fan 1993	
Quiroga, L.	Learning Fuzzy Logic from	ISE	Completed	Main Advisor
Quin 98, 2	Examples	ISL	Fall 1993	111411111111111111111111111111111111111
Sahinoglu, M.	Development of a Real-Time	ISE	Completed	Main Advisor
,	Scheduler Using Adaptive Critics	Supported by	Fall 1993	
	Concepts	Grants Provided to		
		Dr. Luis Rabelo		
Lee, H-H.	Design of FMS by Integrating	ISE	Completed	Main Advisor
,	Artificial Neural Networks and	ISE	Fall 1992	
	Simulation			
Ma, H.	A Decision Support System for	ISE	Completed	Main Advisor
	Robotic Motion Planning Using	Supported by	Fall 1992	
	Artificial Neural Networks	Grants Provided to		
		Dr. Luis Rabelo		
Tachikawa, N.	Modeling of a Manufacturing	ISE	Completed	Main Advisor
	Company; Case Study: Honda		Summer 1992	
	Automotive Seat Covers Suppliers			

List of educational contributions

NEW COURSES DEVELOPMENT

1. ESI 6529 - ADVANCED SYSTEMS SIMULATION

A project oriented course that will emphasize System Dynamics and Agent-based modeling using AnyLogic, Parallel Simulation using SPEEDES, and Distributed Simulation using the HLA/RTI. Note that this year's objective is different than the Catalog description. This is truly an Advanced course. We intend to cover state-of-the-art topics. Also, the pre-requisite for this course is ESI 6532, Object Oriented Simulation (in collaboration with Dr. Jose Sepulveda).

2. ARTIFICIAL NEURAL NETWORKS IN MANUFACTURING (ISE 626)

The purpose of this course is to introduce artificial neural networks and demonstrate their possible applications in engineering systems, Industrial and Systems Engineering Department, Ohio University, (Fall 1991, Fall 1992, Winter 1994, Winter 1995, Winter 1996).

3. COMPUTER INTEGRATED MANUFACTURING SYSTEMS (ISE 640 to be changed to ISE 650)

In this course advanced CIM concepts are introduced such as: Hierarchical and Distributed Control, Computer Networking and Manufacturing Systems Modeling, Design for Manufacturability and Assembly, Multi-Criteria Manufacturing Decision Making, and Manufacturing Enterprise Modeling, ISE Department, Ohio University, (Winter 1992, Winter 1993, Winter 1994, Winter 1995)

4. COMPUTER INTEGRATED MANUFACTURING (ME 560)

In this course CIM concepts are introduced such as: CAD, CAM, CNC, Process Planning, Manufacturing Process, Group Technology, CAD/CAM Integration, and CIM. This course is Lab Intensive (Several CNC machines and software packages are introduced). Mechanical Engineering Department, Ohio University. This course was developed and team-taught with Dr. R. Judd from ECE (as the principal instructor) in Fall 1993.

5. ROBOTICS FOR MANUFACTURING SYSTEMS ENG. (ISE 414/514)

In this course robotics and manufacturing automation concepts are introduced. This course is Lab intensive (using the "new" Robotics and CIM Lab).

6. GENETIC ALGORITHMS (ISE 710)

In this course Genetic Algorithms and Evolutionary Computation concepts are introduced. Their applications and mathematical developments are emphasized. In addition, their connections to other paradigms such as Fuzzy Logic and Neural Network are also introduced (Fall 1994, Fall 1995).

7. ARTIFICIAL NEURAL NETWORKS USING OPERATIONS RESEARCH TECHNIQUES (ISE 726)

This course offers in-depth coverage of the latest developments in artificial neural networks using OR techniques. While the course concentrates most heavily on gradient -descent based neural networks, dynamic programming and numerical techniques are also described (Spring 1996).

8. THE WORLD OF VIRTUAL REALITY AND MULTIMEDIA (TIER III)

An interdisciplinary course to prepare undergraduate students for the scientific and technical environments of the future, emphasizing computers, computer hardware and software, evolution and history of virtual reality.

COURSE REVISION ACTIVITIES

- 1. **EIN5392C MANUFACTURING SYSTEMS ENGINEERING** 2008 was revised. New sections in the course in large scale manufacturing systems and systems engineering in complex systems.
- 2. **EIN5108 ENVIRONMENT OF TECHNICAL ORGANIZATIONS** 2007 was revised. New sections in the course were added in Leadership, and a laboratory using simulation to train/educate in Leadership.
- 3. **EIN6339 OPERATIONS ENGINEERING** 2004-2005 was revised. New sections in the course were added in the Systems Engineering, Systems Thinking, Theory of Constraints, Six-Sigma, and Lean Six-Sigma.
- 4. **EIN5602 EXPERT SYSTEMS FOR INDUSTRIAL ENGINEERING** was revised completely. New sections in Neural Networks and support vector machines were added.
- 5. **STA3032H STATISTICS and PROBABILITIES for HONOR STUDENTS** was revised. New sections to incorporate the INTERNET, the WEB, and Artificial Intelligence were introduced.

- 6. **ESI 6358 DECISION ANALYSIS** was revised completely. The emphasis of this course was changed from a traditional viewpoint to a more systematic viewpoint. System Dynamics, complexity theory, chaos, and causality principles were added with case studies to reflect the new changes in this area.
- 7. **EIN6336 PRODUCTION AND INVENTORY** CONTROL was revised completely. The traditional Inventory Control has been only explained as a manufacturing related function. We have extended with more problems in the areas of the service enterprise: Health-Care, Financing, Banking. In addition, we added concepts of supply chain management. Other techniques not considered in the traditional programs in Industrial Engineering were added.
- 8. **EIN5177 MANAGEMENT INFORMATION SYSTEMS FOR INDUSTRIAL ENGINEERS** 2001-2002 was revised. New sections in the course were added in software engineering. These sections are important to manage projects with software components.
- 9. **EIN5177 MANAGEMENT INFORMATION SYSTEMS FOR INDUSTRIAL ENGINEERS** 2003-2004 was revised. New sections in the course were added in the Semantic Web and Technology Management.

NEW LABORATORY DEVELOPMENT AND ACTIVITIES

1. NSF CENTER FOR E-DESIGN

Participation in the development and design of the new Center for e-Design in the Partnership 2 Bldg..

2. DEVELOPMENT OF IN-HOUSE PROPOSAL FOR RFID LABORATORY (Spring 2005)

This proposal was not funded. It was intended to create a new laboratory for RFID and Supply Chain Management Applications.

- 3. DEVELOPMENT OF IN-HOUSE PROPOSAL FOR IEMS NANO-TECHNOLOGY LABORATORY (Spring 2005) This proposal was not funded. It was intended to create a new laboratory for nanotechnology and processes.
- 4. **CD FOR EIN5602**

A CD to facilitate the lab activities of the students in this course was developed. This CD contained "EASYNN" (a software for Neural networks) and "EXSYS" (a software for expert systems development). This facilitated their assignments.

5. CD FOR EIN5117 - 2003

A CD for the ancillary material and different software packages (OpenSource and FreeWare) was developed for the different assignments that the students needed

6. CD FOR EIN5117 - 2004

A CD for the ancillary material and different software was developed for the different assignments that the students needed. This CD also contain lecture and other material.

7. COMPUTER INTEGRATED MANUFACTURING LABORATORY

Active role in the development of a CIM cell for the College of Engineering at Ohio University.

8. BUILDING BLOCKS OF AUTOMATION LABORATORY

Development of an Undergraduate Laboratory to teach principles of automation for the ISE Department at Ohio University (with PLCs, Sensors, and Automation Modules).

SUPPORT TO NEW ACADEMIC PROGRAMS

1. IEMS SYSTEMS ENGINEERING AND MANAGEMENT (MS DEGREE)

Supported the organization of the program and design of courses.

2. SYSTEM OF SYSTEMS INTEGRATION (Ph.D. DEGREE Option)

Supported the organization of this new program (with Dr. Sepulveda).

3. INTERNATIONAL ENGINEERING (Minor at the College of Engineering and Computer Science)

Supported the organization of this new minor (with Dr. Avelino Gonzalez).

4. LEADERSHIP ENGINEERING (Minor at the College of Engineering and Computer Science)

Supported the organization of this new minor (with Dr. Lesia Crumpton-Young and Dr. McCaulley-Bush).

INTERNATIONAL AGREEMENTS

1. UCF AND UNIVERSIDAD DIEGO PORTALES (REPUBLIC OF CHILE) 2010

Facilitated and created this international agreement. Contacted and meetings with different deans (in particular Dr. Pepe Robles – Dean of Engineering). International agreement will be in areas of research and simulation. Potential joint projects in the areas of remote sensing and simulation have been submitted to the Chilean Government.

2. UCF AND UNIVERSIDAD TECNOLOGICA DE PANAMA (REPUBLIC OF PANAMA) 2009

Facilitated and created this international agreement. Contacted and meetings with different deans and the Chancellor of the Technological University of Panama. Coordinated with Angel Cardec (UCF International Office) to start the different procedures and connections.

3. UCF AND UNIVERSIDAD DE JAEN (ANDALUCIA, SPAIN) 2008

Facilitated and created this international agreement. Contacted and meetings with different deans of the Universidad de Jaen. Coordinated with Angel Cardec (UCF International Office) to start the different procedures and connections.

4. UCF AND RAMON LULL UNIVERSITAT (BARCELONA, SPAIN) 2007

Facilitated and created this international agreement. Contacted and meetings with different deans of Ramon Lull Universitat. Coordinated with Angel Cardec (UCF International Office) to start the different procedures and connections.

5. UCF AND UNIVERSIDAD DE LIMA (REPUBLIC OF PERU) 2006

Facilitated and created this international agreement. Contacted and meetings with different deans of the Universidad de Lima. Coordinated with Angel Cardec (UCF International Office) to start the different procedures and connections.

RESEARCH

• **Keywords:** Enterprise/engineered systems simulation, hybrid continuous-discrete simulation models in a distributed-simulation-like arrangement, supply chain management, agents, the semantic web, and enterprise engineering.

List of Publications

MONOGRAPHS

Williams, K. E., L. Crumpton-Young, and L. Rabelo. **The Organization of Technical Curriculum for the Acquisition of Declarative Knowledge, Monograph** VMD Verlag: Saarbrücken, Germany, 2009, 85 pages.

EDITOR OF CONFERENCE PROCEEDINGS

Mehta, B. and Rabelo, L. (Editors) **Proceedings of the Ohio Aerospace Institute Neural Networks Symposium and Workshop**, Sponsored by NASA Lewis Research Center and Wright Patterson Air Force Base, 1995, Ohio University Press, Athens, Ohio, 444 pages.

BOOK

LEADERSHIP FOR ENGINEERING STUDENTS (being written)

Writing book with the support of SimuLearn (www.simulearn.com). The book will use simulation not as much as a learning tool but as a practice tool. The objective of this book is to help students to become more self -aware and to help develop their emotional intelligence through how they view communication. They do this by:

- learning the timing and balance of supporting or opposing people and ideas,
- recognizing and moderating with tension,
- encouraging creativity,
- gaining and sharing power

In the simulator (being developed by SimuLearn), students will be able to practice different approaches and see in real time the impact their behavior and decisions impact others. The simulator is based on an award winning engine with A.I (Artificial Intelligence) 3D characters body language, facial expression and behaviors. This simulator is part of the book (CD).

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- 158. Rabelo, L and X. Avula, "Intelligent Control of a Robotic Arm Using Hierarchical Neural Network Systems," *Proceedings of the International Joint Conference on Neural Networks*, Seattle, 1991, pp. II747-II751.

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- 162. Vila, J., L. Rabelo, and A. Deshmane, "Applying ANNs of the Jordan Type to Job Sequencing Under Varying Environmental Inputs," *Proceedings of the IASTED*, Switzerland, June 25-27, 1990, pp. 308-312.
- 163. Alasya, D. and L. Rabelo, "An Intelligent System for Economic Development," *Proceedings of the IASTED International Conference on Artificial Intelligence Applications and Neural Networks*, Zurich, Switzerland, June 25-27, 1990, pp. 255-257.
- 164. Rabelo, L., S. Alptekin and A. Kiran, "Synergy of ANNs and KBESs for Intelligent FMS Scheduling," *Proceedings of the International Joint Conference on Neural Networks, San Diego, 1990, pp. 1359-1366.*
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RESEARCH /TECHNICAL REPORTS

- 1. **Annual Report of EPSCoR Project Management 2011**, Report written by Luis Rabelo for NASA, May 2011 (under contract by NASA).
- 2. **Annual Report of EPSCoR Project Management 2010**, Report written by Luis Rabelo for NASA, May 2010 (under contract by NASA).
- 3. **Development of a Prototype of a Distribution System for UUVs for Lockheed Martin**, Report written by Luis Rabelo for Lockheed Martin UUV Study Project, July 2007 (under contract by Lockheed Martin).
- 4. **Study of the Different Run-Time Infrastructures (RTIs) for Lockheed Martin,** Report written by Luis Rabelo for Lockheed Martin UUV Study Project, May 2007 (under contract by Lockheed Martin).
- 5. Study of the Different Run-Time Infrastructures (RTIs) for NASA Kennedy Space Center (KSC) Distributed Operations, Report written by Luis Rabelo for NASA RTI SGOS Study Project, May 2006 (under contract by NASA).
- 6. **Power Systems Simulation Testbed,** Report written by Luis Rabelo, NASA Fellow 2005, 2006 RESEARCH REPORTS, NASA John F. Kennedy Space Center.
- 7. **Usability Study of Virtual Engineering Environments,** Report written by Jeff Dawson and Luis Rabelo for NASA Usability Study Project, November 2004.
- 8. **Probability Comparison,** Report written by Jose Sepulveda, Jeppie Compton, and Luis Rabelo. This report is being used by NASA Kennedy Space Center in Safety (October 2003).
- 9. **Integration of Models,** Report written by Luis Rabelo. This report is being used by NASA Kennedy Space Center to understand the integration of Models using HLA and XML and other trends in Systems Integration. (October 2003). Available in TechDoc at NASA (40 Pages)
- 10. **Model Assessment,** Report written by Luis Rabelo, Mario Marin, and Jeppie Compton. This report is being used by NASA Kennedy Space Center and includes a survey of the different simulation systems being used at NASA KSC. Available in TechDoc at NASA (80 Pages).
- 11. **XML Report,** Report written about the possibilities of XML and Ontologies for the integration of Model at NASA KSC. Available in TechDoc at NASA (50 Pages).
- 12. **The Virtual Test Bed Project,** Report written by Luis Rabelo, NASA Fellow 2003, 2003 RESEARCH REPORTS, John F. Kennedy Space Center.
- 13. **The Virtual Test Bed Project**, Report written by Luis Rabelo, NASA Fellow 2002, 2002 RESEARCH REPORTS, John F. Kennedy Space Center.
- 14. **The Virtual Test Bed Project at KSC**, Report written by Mario Marin and Luis Rabelo, NASA KSC Research and Technology Report 2004.
- 15. **Power System Simulation Test Bed**, Report written by Luis Rabelo and Jeppie Compton, NASA KSC Research and Technology Report 2005 (Submitted).
- 16. **NSF Report Reengineering the Undergraduate IEMS Program (Planning Grant)**, Report written to the National Science Foundation with Dr. Lesia Crumpton-Young (PI), Kent Williams, and Ed Hampton, 2004.
- 17. **Simulation and Logistics of the AAS (Alternate Access to Station)**, Report written with Dr. Sepulveda and Mr. Jeppie Compton for Boeing Phantom Works, 2003 (ITAR Restricted Project).
- 18. Multimedia-Based Teaching/Learning Modules for Production Scheduling using Artificial Intelligence Techniques, Report written by Dr. Luis Rabelo for NSF Award No. 9409421, 1996.
- 19. Integration of Neural Networks, Simulation, and Genetic Algorithms for Flexible Manufacturing System Scheduling, Report written by Dr. Luis Rabelo for NIST Award No. 70NANB3H1418, 1994.
- 20. **Reengineering the Undergraduate IEMS Curriculum (Departmental Reform Grant)**, Report written to the National Science Foundation, Dr. Luis Rabelo (PI), 2008.

Invited Presentations and Presentations in Conferences without Proceedings

- 1. "Hybrid Real Options for Emerging Technologies, Green Energy, and Innovation," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013 (18 May 2013).
- 2. "A Systematic Architecture of Operational Innovation," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013 (21 May 2013).
- 3. "Effective Leadership using System Dynamics and the Matrix of Change," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013 (20 May 2013).
- 4. "A Framework for Project Selection using Knowledge," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013, (20 May 2013).
- 5. "Hierarchical Distributed Simulation Modeling of Space Missions," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013, (20 May 2013).
- 6. "Distributed Hybrid Simulation Modeling: Basic and Applied Research," 2013 Industrial and Systems Engineering Research Conference, San Juan, Puerto Rico, 2013, (21 May 2013).
- 7. "International Technology Investments Using Real Options: A Case Study in Telecommunications," IEMS Conference 2013, Cocoa Beach, FL, March 25, 2013.
- 8. "Impact of the Leadership Transition on Innovations," IEMS Conference 2013, Cocoa Beach, FL, March 24, 2013, (CD-ROM).
- 9. Rabelo L. "Engineering Management and Trends," Bogota, Colombia, Universidad de La Sabana, 17 April 2013.
- 10. Rabelo L. "Experiencias de Simulacion en la NASA," Santiago, Chile, Universidad del Desarrollo, November 2012. http://ingenieria.udd.cl/noticias/2012/11/seminario-%E2%80%9Cexperiencias-de-simulacion-en-la-nasa%E2%80%9D/
- 11. Rabelo L. "Simulation en NASA," CONGRESO CIENTÍFICO LATINA 2012, Panama City, Republic of Panama, Universidad La Latina, 20 November 2012.
- 12. Rabelo L. "Simulacion y la Cadena de Suministro" Seminario de la Cadena de Suministros, Panama City, Republic of Panama, Universidad Maritima Internacional de Panama, 21-23 November 2012.
- 13. Rabelo L. "Simulation in NASA" Primer Congreso de Tecnologia e Informacion, Tuxtla Gutierrez, Chiapas, UNAC, November 2012.
- 14. Rabelo L. and J. Compton, "Systems Engineering: Experimental Program to Stimulate Competitive Research," NASA Project Management Challenge 2012, February 22-23, 2012, Caribe Royale Hotel and Convention Center in Orlando, Florida, Level: National.
- 15. Elattar A., and L. Rabelo, "A Framework for Transitional Management," Session: Engineering Management Tuesday PM, Applied Solutions Sessions, IIE Annual Conference & Expo, Orlando, FL, May 19-22, 2012.
- 16. NASA EPSCoR Update, Luis Rabelo, presented to the NASA EPSCoR Caucus, Washington DC, March 2011.
- 17. Simulation Agents in Retailing, Luis Rabelo, Presented to Diego Portales University and Ripley Corporation, Santiago, Chile, November 24, 2010.
- 18. NASA EPSCoR Update, Luis Rabelo, presented to the NASA EPSCoR Caucus, Portland, Maine, October 2010.
- 19. NASA EPSCoR, Luis Rabelo, Presented to HBCUs White House Initiative, Huntsville, Alabama, April 2010.
- 20. NASA EPSCoR Update, Luis Rabelo, presented to the NASA EPSCoR Caucus, Washington DC, March 2010.
- 21. Supply Chain Management, Luis Rabelo, Presented to Diego Portales University and Ripley Corporation, Santiago, Chile, November 24, 2009.
- 22. Presentation about the NASA EPSCoR Project, National Space Grant Directors Fall Meeting, Portland, Oregon, October 2009.
- 23. Stabilization of the Supply Chain by Using a Policy Optimization Approach Presenting Author: Alfonso Sarmiento, University of Central Florida, 4000 Central Florida Blvd., Orlando FL 32816, United States of America, sarmient@mail.ucf.edu Co-Author: Albert Jones, and Luis Rabelo, Informs Conference Fall 2009, San Diego, 2009.
- 24. Luis Rabelo, Keynote Speaker in Congreso Internacional de Technologias Informaticas para la Educacion en Salud, Tuxtla Gutierrez, Chiapas, Mexico, March 31 April 03, 2009.
- 25. Presentations to students and Faculty of the UNACH (Universidad Autonoma de Chiapas) and La Universidad Politecnica de Chiapas (March 31st, and April 3rd, respectively). Tuxtla Gutierrez, Chiapas, Mexico.
- 26. Presentations: "Multi-Agent System for Complex Systems" and "Simulation for Health Care Systems", Industrial Engineering Research Conference, Miami, Florida, 2009,
- 27. Luis Rabelo, presentation in the National Science Foundation, Selected by EEC, May 2008.
- 28. Luis Rabelo, presentation in "My Experiences as a NASA Fellow," IIE National Meeting, Celaya, Guanajuato, Mexico, 2008.
- 29. Luis Rabelo, presentation in "Supply Chain Management," IIE National Meeting, Queretaro, Mexico, 2008.
- 30. Luis Rabelo, presentations in "Systems of Systems", and "A Methodology for Detecting and Minimizing Disturbances in the Supply Chain," INFORMS International, Puerto Rico, 2007.

- 31. Serge N. Sala-Diakanda, Yanshen Zhu, Haluk Hakin, Luis C. Rabelo, Jose Sepulveda, "Using GIS to Enhance the Visualization of an Object-Oriented Simulation of Ship Behavior in a Combat Environment," Industrial Engineering Research Conference, 2007 (Nashville, TN).
- 32. Faculty Colloquium given at the Industrial Engineering Research Conference (International Level), Orlando, Florida, May 2006 about Tenure Experiences.
- 33. Presentation "My Experience in NASA as a NASA Fellow," XIX Congreso Nacional y V Congreso Internacional de Informática y Computación de la ANIEI, (CNCIIC-ANIEI 2006), Chiapas, 2006. Keynote Speaker.
- 34. Presentation "Exploration Program and Simulation," Centro Regional Autonomo de la Universidad Tecnologica de Panama, November 2006.
- 35. Presentation "Simulacion por Computadoras para la Equidad, Igualdad y Sustanibilidad,," Congreso de Ingenieria de Azuero 2006, La Villa de los Santos. Keynote Speaker.
- 36. Presentation "A Methodology for Suply Chains using System Dynamics and Genetic Algorithms," Industrial Engineering Research Conference, Orlando, Florida, 2006.
- 37. Presentation "Desarrollo de un Modelo de Simulacion para Toma de Decisiones Utilizando Dinamica de Sisemas," Technological University of Panama, First Congress in Engineering and Technology "Perspectivas Innovadoras Para el Desarrollo del Pais", October 3 5, 2005.
- 38. Keynote Speaker, "Advanced Simulation Environments for Decision-Making", TECNOCOM (Regional Conference of South America), Medellin, Colombia, August 2005.
- 39. Seminar "Operations Research", Tools for Your Future, Society of Women Engineers Space Coast, May 2005.
- 40. Panel "Systems Engineering", Tools for Your Future, Society of Women Engineers Space Coast, May 2005.
- 41. Seminars at NASA about the Virtual Test Bed and its recent developments, Kennedy Space Center, June August 2005.
- 42. Seminar in "Advanced Decision-Making", IceConsult Inc., Reykjavik, Iceland, May 2005.
- 43. Keynote Speaker and Conference-Presentation in "Inteligencia Artificial", Universidad de Lima, Lima, Peru, October 2004.
- 44. Keynote Speaker and Seminar in "Gestion de Proyectos", Universidad de Lima, Lima, Peru, October 2004.
- 45. Keynote Speaker and Conference-Presentation in "Gestion de Proyectos", Universidad de Lima, Lima, Peru, October 2004.
- 46. Keynote Speaker for the Information Technologies Congress in Chihuahua City, Chihuahua, Mexico, February 2004.
- 47. Keynote Speaker for Electronics Commerce, Congress in Power Integration for Latin America, Panama, Republic of Panama, March 2004.
- 48. Keynote speaker with CIAPEM, the committee of Information Technologies of the Mexican States and the Central Government, Culiacan, Sinaloa, September 2003.
- 49. Rabelo, L. Virtual Test Beds, World Space Congress, Titusville, Florida, May 2003.Rabelo, L. Virtual Test Bed for NASA Shuttle Re-Entry Seminar, Boeing Phantom Works, Huntsville, Alabama, March 2003.
- 51. Rabelo, L. A Virtual Range, INCOSE Regional Conference, Huntsville, Alabama, November 2002.
- 52. Rabelo, L. **Integration of Simulation Models at NASA**, Seminar presented at the National Institute of Standards and Technology, Washington DC, March 2003.
- 53. Bardina, J., Rabelo, L. Intelligent Launch and Range Operations (ILRO), NASA Johnson Space Center, Houston, Texas, October 2002.
- 54. Rabelo, L., Virtual Test Bed: Seminar NASA Wallops Flight Facility, January 2003.
- 55. Rabelo, L. A study and Simulation of the Entry of the New Generation of Wireless Communication Technology (3G) on the North American Market, INFORMS Telecommunications Conference, Boca Raton, Florida, March 2002.Rabelo, L. Neural Networks and eCommerce (Keynote) University of Aguas Calientes Aguas Calientes, Mexico, March 2001.
- 57. Keynote speaker with CIAPEM, the committee of Information Technologies of the Mexican States and the Central Government, Aguas Calientes, Aguas Calientes, Mexico, September 2000.
- 58. Rabelo, L. A Hybrid Scheduler Using Neural Nets & Genetic Algorithms (Invited) INFORMS Washington DC May 1996 Conference.
- 59. Rabelo, L. **Computational Intelligence (Invited)** Electrical Engineering Week, Technological University of Panama, Panama, June 1996.
- 60. Thomas, G., Rabelo, L, and Hjartarson, G., **Self-Organizing Genetic Algorithms (Invited)** INFORMS New Orleans Fall 1995 Conference.
- Rabelo, L. Adaptive Scheduling Using the Integration of OR and AI (Invited) Seminar Given to Manugistics, Inc., Rockville, Maryland, November, 1995. Hybrid Scheduling (Invited) Seminar Given to AutoSimulations, Inc, Bountiful, Utah, December 1995
- 62. Rabelo, L. A Hybrid Intelligence View of Scheduling (Invited) INFORMS New Orleans Fall 1995 Conference.
- 63. Rabelo, L. Neural Networks in Control (Invited) Cal Poly, NSF sponsored workshop, June 1995.
- 64. Rabelo, L. **Integrating OR and AI for Production Sequencing and Scheduling** 1995 NSF Design and Manufacturing Grantees Conference, San Diego, California, January 1995.

- 65. Rabelo, L. **Neural Networks and Genetic Algorithms**, 2-day Workshop given to ICE Consultants, Inc., Reykjavik, Iceland, December 1994
- 66. Mehta, B., Rabelo, L. Using Fuzzy ARTMAP for Prediction of the Secondary Structure of Proteins Workshop (Invited) IEEE EMBC, Baltimore, MD, November 2, 1994.
- 67. Rabelo, L., Sahinoglu, M. Using Neural Networks and Dynamic Programming for real-time Learning ORSA/TIMS Joint National Meeting, Detroit, October 1994.
- 68. Jones, A., Rabelo, L., Yih, Y. Artificial Intelligence Approach to Real-Time Sequencing Problems (Invited) ORSA/TIMS Joint National Meeting, Detroit, October 1994.
- 69. Rabelo, L., Vila, J. Artificial Neural Networks, 3-Day Workshop, supported by InfoTech and TRP, Springfield, Illinois, September 26-28, 1994.
- 70. Rabelo, L., **Soft Computing and Neural Networks (Invited)**, ITESM, Tampico, Tamaulipas, Mexico, 1995; **Soft Computing (Invited)**, ITESM, Leon, Guanajuato, Mexico, September 1995; **Neural Networks (Invited)**, University of Baja California, Mexicali, Mexico, November 1994; **Computers and Neurons (Invited)**, ITESM, Torreon, Mexico, October 1994; **Artificial Neural Networks (Invited)**, ITESM Toluca, Mexico, September 1994; **Principles of Artificial Intelligence (Invited)**, ITESM, Tuxtla Gutierrez, Mexico, October 1994; **Genetic Algorithms (Invited)**, University of Baja California, Mexicali, Mexico, February 1996;
- 71. Jones, A., Rabelo, L., Yih, Y. **Intelligent Scheduling Systems** Fifth Annual Meeting of the Production and Operations Management Society (POMS), Washington D.C., October 8-11, 1994.
- 72. Rabelo, L. **Multimedia in Engineering Education** Panel "Multimedia" (**Invited**), Midwestern Computer Conference, Illinois State University, Normal, Illinois, 1994.
- 73. Rabelo, L., Avula, X., Ma, H. Neuro-Control of a Robotic Manipulator with Multiple Degrees of Freedom (Invited) IMACS World Congress, Atlanta, Georgia, July 1994.
- 74. Yih, Y., Rabelo, L., Jones, A. An Artificial Intelligence Framework for Intelligent Scheduling Systems Workshop at the AAAI'94 Conference, Seattle, Washington, August 1994.
- 75. Rabelo, L. **Neural Network: an Introduction for Engineers (Invited)** XIX Simposium Internacional de Sistemas Computacionales, Monterrey, Mexico, February 24-26, 1994.
- Rabelo, L., Jones, A., Yih, Y. Candidate Rule Selection for FMS Scheduling (Invited) TIMS/ORSA Joint National Meeting, Chicago, May 16-19, 1993.
- 77. Rabelo, L. **OU- CIM Experience (Invited)** National Science Foundation, CIM Summer Workshops for Undergraduate Engineering Faculty, University of Missouri, Rolla, Missouri, 1993.
- 78. Rabelo, L. Hybrid Artificial Intelligence (Invited) Compuexpo 92, Panama City, Panama, 1992.
- 79. Rabelo, L. Integration of Artificial Neural Networks and Knowledge-Based Systems: A Case Study (Invited), Neural Information Processing Systems, Post Meeting Workshop, November 29 December 1, 1990, Keystone, Colorado.
- 80. Alptekin, S., Rabelo, L. Modeling Artificial Neural Networks for Adaptive FMS Scheduling (Invited) TIMS/ORSA Joint National Meeting, Las Vegas, May 7-9, 1990.
- 81. Rabelo, L., Alptekin, S. Increasing the Degree of Automation in CNC Systems Using AI and the integration of CAD/CAM Manufacturing International 1990, (ASME, IEEE, IIE) Atlanta, March 25-28, 1990.
- 82. Rabelo, L., Alptekin, S. **Simulation in Design of Parallel Processing Systems for Manufacturing** Xth International Conference on Production Research, Nottingham, England, August 14-17, 1989.
- 83. Rabelo, L., Alptekin, S. Using Hybrid Neural Networks/Expert Systems for Intelligent Scheduling in Flexible Manufacturing Systems International Joint Conference on Neural Networks (IJCNN), sponsored by the IEEE and the International Neural Network Society, (IEEE, INNS), Washington D. C., June 18-22, 1989

• Patents and Inventions

For the first time, two of his patents have allowed neural networks to meet the requirements of civil aviation regulations and allows neural networks to fly in civilian aircrafts. (US 6,577,960 and US 6,157,894)

- 1. Liquid gauging apparatus using a time delay neural .US 6,577,960 (Year 2003) (First Inventor)
 - Liquid gauging apparatus using a time delay neural network for determining a quantity of liquid in a container that is not directly measurable by sensors is disclosed. The apparatus comprises a plurality of sensors and a processor. Each of the sensors are capable of measuring a respective parameter of the liquid and for producing a time varying sensor output signal representative of the respective parameter measured thereby. The processor is programmed to process the sensor output signals by a time delay neural network algorithm to determine a current quantity of the liquid in the container based on current and past parameter measurements of the sensor output signals.
- 2. Liquid Gauging Using Sensor Fusion and Data Fusion for Aircrafts .US 6,157,894 (Year 2000)

 Sensor Fusion, Data Fusion, and Information Fusion using the integration of Neural Networks, Fuzzy Logic, Extended Kalman Filtering schemes, and Bayesian Approaches. The system does not need a model(s) initially to work. Estimation is superior to any other known methodology used in Aerospace industry for the particular problem addressed. This is an algorithm/methodology embedded in a blackboard-architecture of a product already being used in airplanes/aircrafts.
- 3. Probe Placement Using Genetic Algorithm Analysis for Aircrafts US 6,006,604. (Year 1999). (First Inventor)
 This patent introduced a new type of genetic algorithm/optimization analysis for sensor and data fusion. The methodologies optimizes configuration of sensors and models for aerospace systems. The methodology can be used to identify ways to fuse signal from numerous/different sensors/models, where to locate the sensors, what type of sensors, what signal conditioning/processing models should be made, and how many sensors.
- 4. Provisional Patent: Methodologies for Software to Modify Human Voice. (First Inventor 2003)

 This provisional patent deals with the utilization of Ontologies, Artificial Intelligence Techniques, Speech Recognition, Speech Synthesis, software engineering, visualization, and delivery of these services over the Internet to improve the performance of Human Speakers with Speech Pathological Problems.

- Grants and Contracts (2002 2013) (Strictly at UCF)
 - Including External and Internal Funding, Fellowships and specific funding for undergraduate students

At University of Central Florida (UCF), I contributed to generating more than \$3,611,516 as Principal and Co-Principal Investigator of several projects (2002-2014).

- o As principal investigator, generated in excess of \$ 1,695,568 in projects.
- o As co-principal investigator, generated \$ 1,981,412 in projects.
- o As credit/effort assigned, generated over \$ 1,666,682 in projects.
- 1. Developing ROK-ADD M&S Program, Co-Principal Investigator, (Dr. Gene Lee PI), Boeing Corporation, \$150,000.00 (2014). Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50% of the \$150,000.00 assigned to UCF. Managed by Office of Research (UCF).
- 2. Applications of Advanced Lean Manufacturing Principles (ID: 1056081), **Principal Investigator**, ScreenWorks USA, \$34,662.00 (2013). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants. **Credit/effort assigned to Dr. Rabelo = 100%** of the \$34,662.00 assigned to UCF. Managed by Office of Research (UCF).
- 3. An interoperability technology for LVC components and its prototype in the component-based simulation environment (AddSIM) (ID: 1055573) (CO-PI), (Dr. Gene Lee PI), Korean ADD, \$543,750.00 (2014). Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50% of the \$\$543,750.00 assigned to UCF. Managed by Office of Research (UCF).
- Adaptive Virtual Response Trainer (AVRT) Regression Testing Process, Principal Investigator, Engineering & Computer Simulations, Inc., \$13,020.00 (2013-2013). Credit/effort assigned to Dr. Rabelo = 100%. \$13,020.00 transferred to UCF in 2013. Managed by Office of Research (UCF).
- 5. NASA IPA Assignment, **Principal Investigator**, NASA, <u>\$121,762.00</u> (2010-2011). Credit/effort assigned to Dr. Rabelo = 100%. \$121,762.00 transferred to UCF in 2010. Managed by Office of Research (UCF).
- 6. NASA IPA Assignment Performance Bonus (due to high performance and achievements in the position), **Principal Investigator**, NASA, \$2,271.00 (2009-2010). **Credit/effort assigned to Dr. Rabelo = 100%**. \$2,271.00 transferred to UCF in 2010. Managed by Office of Research (UCF).
- 7. NASA IPA Assignment, **Principal Investigator**, NASA, \$151,475.00 (2009-2010). **Credit/effort assigned to Dr. Rabelo = 100%**. \$151,475.00 transferred to UCF in 2009. Managed by Office of Research (UCF).
- 8. *User Interface for Gas Flames and Detection Modeling,* **Principal Investigator**, Enterprise Energy Research, \$4989.00 (2008). **Credit/effort assigned to Dr. Rabelo = 100%** of the \$4,989.00 assigned to UCF. Managed by Office of Research (UCF).
- 9. Trade Study of Existing Commercial RTI Solutions and Distributed Simulation Environment for Undersea Unmanned Vehicles and Sensor Fusion, Principal Investigator, Lockheed Martin Corporation, \$20,967.00 (2007). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 50% of the \$20,967.00 assigned to UCF. Managed by Office of Research (UCF).
- 10. Engineering Leadership, Co-Principal Investigator, (Dr. Pamela McCaulley Bell PI), National Science Foundation, \$\frac{\$103,219.00}{2006}\$. The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 40% of the \$103,219.00 assigned to UCF. Managed by Office of Research (UCF).

- 11. Reengineering The Undergraduate Industrial Engineering Program, Co-Principal Investigator, (Dr. Lesia Crumpton-Young PI), National Science Foundation, \$5,000.00 (2006). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants. This is an extension to the current grant. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 25% of the \$5,000.00 assigned to UCF. Managed by Office of Research (UCF).
- 12. A Framework and Taxonomy for the Simulation of Spaceport Ground Processing and Launch Operations, Co-Principal Investigator, (Dr. Sepulveda PI), Florida Space Institute (State of Florida Grant), \$250,000.00 (2006). \$125,000.00 were assigned to the University of Florida (Dr. Paul Fishwick PI). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50% of the \$250,000.00 Managed by Office of Research (UCF).
- 13. Simulation Modeling Environment to Measure Sensors' Effectiveness Using GIS information and Sensor Fusion, Co-Principal Investigator, (Dr. Sepulveda PI), Office of Navy Research (ONR) Award, \$179,947.00 (2006). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF).
- 14. Simulation Modeling Environment to Measure Sensors' Effectiveness Using GIS information, Co-Principal Investigator, (Dr. Sepulveda PI), Office of Navy Research (ONR) Award, \$80,000.00 (2006). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF).
- 15. Studies of the RTI for SGOS, Principal Investigator, NASA Kennedy Space Center, \$26,800.00 (\$14.1 K for students support, \$10K Software, \$2.7K for seminars, \$5k Computers and overhead from USTDC), Fall 2005 (Total of \$38,000.00). Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. To be managed, \$11.2K by USTDC (NASA KSC ASRC) and \$26.8K by Office of Research (UCF).
- 16. NSF Center for e-Designs, Co-Principal Investigator, (Dr. Chris Geiger PI), NSF <u>\$379,055.00</u> (2005-2008). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 10%. Previously managed by Department Chairperson: Dr. Crumpton-Young and Office of Research (UCF).
- 17. Modeling the Effectiveness of Underwater Sonar, Co-Principal Investigator, (Dr. Sepulveda PI), Office of Navy Research (ONR) Award, \$75,000.00 (2005). The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF)
- 18. Usability of Distributed Simulation Environments, Principal Investigator, (Dr. Sepulveda CoPI), NASA Johnson Space Center, \$42,998.00 (2004-2005) (Research ID: 1041756 and 1041757). Extra \$2,000.00 to travel as a member of ASTWG and ARTWG to Colorado Springs during Winter 2005). Total Funds: \$52,000.00.00. The Grant has been utilized to fund primarily Ph.D., MS, and Undergraduate students as Research Assistants. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF) and USTDC (NASA KSC ASRC). Funds provided by NASA KSC and NASA JSC (Shuttle Program through the Industrial Engineering and Safety Program).
- 19. Re-engineering the Undergraduate IEMS Program, Principal Investigator, National Science Foundation, NSF, \$\frac{\\$950.588.00}{2004-2007}\$. This is a very unique grant. It was given to UCF over other universities. The Grant has been utilized to fund primarily Ph.D. and MS Students as Graduate Research Assistants, release for Professors, and trips to different professional meetings and conferences. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 25%. Managed by Office of Research (UCF).
- 20. Development of a Virtual Test Bed using Software Agents and Risk Assessment for Aerospace Range Safety Systems, Phase II, Co-Principal Investigators, (Dr. Sepulveda Principal Investigator), Florida High Tech Corridor Initiative (Internal Funding), January 1 to December 31, 2004, \$33,861. The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF).
- 21. Development of a Virtual Test Bed using Software Agents and Risk Assessment for Aerospace Range Safety Systems, Phase II, Principal Investigator, (Dr. Sepulveda Co-PI), All Points Logistics and NASA Ames Research Center, January 1 to December

- 31, 2004, <u>\$67,721</u>. The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. NASA provided extra funding for Dr. Rabelo and Dr. Sepulveda to attend the FAA Research Center in New Jersey (Atlantic City) for \$2,500.00 and the SAE World Aviation Congress in Reno, Nevada (\$3,000). In addition, All Points Logistics contracted one of our Ph.D. Students: Jaebok Park as a Co-op for the grant, providing an extra \$6,000.00 benefit to UCF. Total: <u>\$81,500.00</u>. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF) and All Points Logistics, Source of Funds: NASA ARC/NASA HQ/NASA KSC.
- 22. Development of a Virtual Test Bed using Software Agents and Risk Assessment for Aerospace Range Safety Systems, Luis Rabelo, Principal Investigator, (Dr. Sepulveda Co-PI), Florida High Tech Corridor Initiative, January 1 to December 31, 2003, \$16,197,000. The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Principal Investigator, Credit/effort assigned to Dr. Rabelo = 65%. Managed by Office of Research (UCF).
- 23. Development of a Virtual Test Bed using Software Agents and Risk Assessment for Aerospace Range Safety Systems, Luis Rabelo, Principal Investigator, (Dr. Sepulveda Co-PI), All Points Logistics, January 1 to December 31, 2003, \$40,000. The Grant has been utilized to fund primarily Ph.D. Students as Graduate Research Assistants and 0.25FTE release for Professors. Luis Rabelo, Principal Investigator, Credit/effort assigned to Dr. Rabelo = 65%. Managed by Office of Research (UCF).
- 24. Integration Study of Virtual Range and Virtual Test Bed: Dr. Rabelo, Principal Investigator and Dr. Sepulveda, Co-PI, Funding by APL NASA Kennedy Space Center and NASA Ames Research Center, September 2003 to May, 2004, \$24,216. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 50%. Managed by Office of Research (UCF).
- 25. *Model Assessment of the Virtual Test Bed II*: Dr. Rabelo, Principal Investigator and Dr. Sepulveda, Co-PI, Funding by APL NASA Kennedy Space Center and NASA Ames Research Center, September 2003 to May, 2004, \$16,931. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by Office of Research (UCF).
- 26. A Virtual Test Bed/Model Assessment of the Virtual Test Bed I, Luis Rabelo: Principal Investigator, APL APL NASA Kennedy Space Center and NASA Ames Research Center, , January 1, 2003 to May, 2004, \$64,277. NASA provided extra \$15,000.00 to trips to conferences and to the different NASA Centers (NASA Johnson Space Center, NASA Ames Research Center, NASA Wallops, INCOSE Conference, AIAA Conference, and ASEM Conference in St. Louis). One student: Amith Paruchuri was hired for 12 months as a Co-OP student by All Points Logistics (approx. \$30K). Total of benefits to UCF: Approx. \$109,000.00. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by Office of Research (UCF).
- 27. Reengineering the Undergraduate IEMS Program, Co-Principal Investigator, (Lesia Crumpton-Young PI), NSF, 2002-2004, \$99,962.00. The Grant has been utilized to fund primarily Ph.D. and MS Students as Graduate Research Assistants, release for Professors, and trips to different professional meetings and conferences. Luis Rabelo, Co-Principal Investigator, credit/effort assigned to Dr. Rabelo = 25%. Managed by Office of Research (UCF).
- 28. NASA- Internship (NASA Kennedy Space Center), Principal Investigator, 2008, **\$22,000**. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by NASA KIP.
- 29. NASA- ASEE Fellowship (NASA Kennedy Space Center), Principal Investigator, 2005, \$12,000. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by NASA ASEE.
- 30. NASA- ASEE Fellowship (NASA Kennedy Space Center and Ames Research Center), Principal Investigator, 2004, <u>\$12,000</u>. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by UCF KSC office.
- 31. NASA- ASEE Fellowship (NASA Kennedy Space Center), Principal Investigator, 2003, \$12,000. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by UCF KSC office.
- 32. *NASA- ASEE Fellowship (NASA Kennedy Space Center)*, Principal Investigator, 2002, \$12,000 and complemented with \$3,000.00 to travel to NASA Ames Research Center and NASA Wallops Flight Facility. Total \$15,000.00. Luis Rabelo, Principal Investigator, credit/effort assigned to Dr. Rabelo = 100%. Managed by UCF KSC office.

- 33. Grants from the UCF Office of Research to Involve Undergraduate Students in Research (Principal Investigator, and Co-PI, UCF) \$4,928.00:
 - a. Student: Ethling Hernandez (2004-2005) **Luis Rabelo, Co-PI, credit/effort = 50%**. Managed by UCF Research Office.
 - b. Student: Alvaro Cantillo (2004-2005) **Luis Rabelo, Co-PI, credit/effort = 50%**. Managed by UCF Research Office
 - 34. Student Support Fellowships (Luis Rabelo, Principal Investigator, credit/effort assigned: 100%) \$4,667.00.

PROFESSIONAL ACTIVITIES

• Service to the Department, College and University:

UNIVERSITY, COLLEGE AND DEPARTMENTAL COMMITTEES

- 1. UCF University Level IRB Committee, 2006 Present.
- 2. UCF University Level Interdisciplinary Center Committee 2004.
- 3. UCF College Level Committee for the Honor Students Selection, 2004.
- 4. UCF, College Level Committee for Excellence Awards, 2006.
- 5. UCF IEMS Member of the Qualifying Examination for Engineering Management, 2002 2004.
- 6. UCF IEMS Member of the Qualifying Examination for Industrial Engineering, 2004.
- 7. UCF IEMS Member of the Qualifying Examination for Simulation Modeling, 2003.
- 8. UCF IEMS Strategic Planning and Revamping Curriculum Committee, 2002 2005.
- 9. UCF IEMS Research Committee, 2004 2005.
- 10. UCF IEMS Graduate Committee, 2002 2004.
- 11. UCF IEMS Search Committee (Industrial Engineering), 2002-2005.
- 12. UCF IEMS Search Committee (Administrative Vice Chairman Position) 2002.
- 13. UCF IEMS Revamping Curriculum for Engineering Management Committee 2002-2003.
- 14. UCF IEMS Department Engineering Management Committee 2001.
- 15. UCF IEMS Department Real-Time Simulation Committee 2001.
- 16. UCF IEMS Department Research Committee 2001.
- 17. UCF College Search Committee for "IEMS Chair", 2001 2002.
- 18. OU University Search Committee for "Dean of Engineering and Technology", 1995 1996.
- 19. OU University Curriculum Council, 1994 1996.
- 20. OU Computer Education Advisory Committee, College of Engineering, OU, 1991 1992
- 21. OU Intergraph CAD/CAM Steering Committee, College of Engineering, OU, 1991 -1996
- 22. OU CIM College-wide Advisory/Action Committee, 1991 1996
- 23. OU College Curriculum Committee, 1995 1996
- 24. OU Department Search Committee 1994
- 25. OU Department Search Committee 1993
- 26. OU Department Search Committee 1992

UNIVERSITY STUDENTS GROUPS ADVISOR

- 1. Faculty Advisor to the Society of Hispanic Professional Engineers (SHPE) (2003 Present)
- 2. Faculty Advisor the Society for International Business at UCF and Rollins College (2003 2005)

Service to the Profession

PROFESSIONAL SOCIETY MEMBERSHIPS

IIE Institute of Industrial Engineers

IEEE Institute of Electrical and Electronics Engineers
ASEE American Society for Engineering Education
ASEM American Society for Engineering Management

INFORMS Institute for Operations Research and the Management Sciences IAMOT International Association for Management of Technology

SAE Society of Automotive Engineers

INTERNATIONAL OFFICES (Executive Officer)

- 1. Member of the Governing Board of the American Society for Engineering Management (2003 2007)
- 2. Member of the Supply Chain Council (SCC) Special Interest Group (SIG) Steering Committee in Aerospace & Defense (A&D) 2005 Selected by Peer Review. The Supply Chain Council has more than 1,000 companies as members.
- 3. Member of the Executive Group of Aerospace Operations of the Society of Automotive Engineers (SAE) (2003 Present)
- 4. Goodwill Ambassador for the United States of America of the International Committee for Christopher Columbus (Internacionale Comitato Per Cristoforo Colombo), ICCC, Genoa, Italy (2013 Present)

• List service as editor, associate editor, or member of editorial board

- 1. Former Member of the Editorial Board of IIE Transactions (2000-2002)
- 2. Former Member of the Editorial Board of the International Journal of Computational Intelligence and Organizations
- 3. Current Member of the Editorial Board of the Modelling and Simulation in Engineering Journal
- 4. Current Member of the Editorial Board of the International Journal of Technology Marketing
- 5. Current Member of the Editorial Board of the UCF Undergraduate Research Journal
- 6. Current Member of the Editorial Board of the Recent Patents on Aerospace Journal
- 7. Current Member of the Editorial Board of the Industrial Engineering & Management Journal
- 8. Current Associate Editor of International Journal of Manufacturing Systems and Industrial Engineering (IJMSIE)
- 9. Former Member of the **Program Committee of the Winter Simulation Conference** (Orlando, 2005)
- 10. Former Member of the <u>International Committee of the 2005 IEEE International Conference on Service Operations and Logistics</u>, and Informatics (Beijing, China, 2005)
- 11. Former Member of the <u>International Committee of the 2005 IEEE International Conference on Service Operations and Logistics</u>, and Informatics (Shanghai, China, 2006)
- 12. Current Member of the Organizing Committee of **SAE AeroTech International Conference** 2007 (Los Angeles, CA), 2009 (Seattle, WA), 2011 (Toulouse, France), and 2013 (Montreal, Canada).

• List consulting activities

- 1. Dr. Rabelo coached and produced with two graduate students a business plan: AccentFree.com. This business plan competed in an entrepreneurial competition that included the universities from Latin America, Spain, and the State of Florida. The entrepreneurial competition was sponsored by the College of Business of Florida International University. AccentFree.com got the first prize from 63 international entries and got the sum of \$10,000.00 as complement of the prize.
- 2. Dr. Rabelo has started companies in Latin America and Europe.
- 3. Dr. Rabelo has participated several times in the most famous entrepreneurial competition: the MIT 50K (2000, 2003).
- 4. Dr. Rabelo is in the board of several ventures.
- 5. Dr. Rabelo has been doing consulting for many companies such as Tyco International, Boeing Phantom Works, Productivity Apex, Inversiones Panama Florida, All Points Logistics, Goodrich Aerospace, and the State of Illinois.

List professional license and certifications held

Professional Engineer (Licensed) - Republic of Panama and Central America

List other external professional service activities

MEMBER OF PANELS OF THE NATIONAL SCIENCE FOUNDATION AND GOVERNMENT PROPOSALS

- 1. Reviewer of the NASA EPSCoR Program 2012, 2013
- 2. Reviewer and Panelist of the NASA Exploration Schools Program (http://www.nasa.gov/offices/education/programs/national/nes2/home/index.html), May 2011.
- 3. Review for the NASA Minority Forum in 2010 and 2011 by Invitation, May 2010 and May 2011.
- 4. Support to the Lunabotics Competition (http://www.nasa.gov/offices/education/centers/kennedy/technology/lunabotics.html).
- 5. Panelist of the NASA CIPAIR (Curriculum Improvements Partnership Award for the Integration of Research) by Invitation, July, 2009, NASA Kennedy Space Center, Florida.
- 6. Panelist of the NASA MSP (MUREP (Minority University Research and Education Program) Small Projects) by invitation, June, 2009, NASA Kennedy Space Center, Florida.
- 7. Panelist of the Panamanian Government to Select the Best Technological News (Written Press, Radio, and Television) in the Republic of Panama (November 2009) by invitation, Technological University of Panama, Panama City, Republic of Panama, November 2009.
- 8. Panelist of the NASA URC (University Research Centers) by invitation, May 2009, NASA, Washington DC.
- 9. Panelist of the NSF (Invitations) Manufacturing Enterprise Systems (MES) Program Division (Design, Manufacture, & Industrial Innovation(DMII)) (December 2003 and April 2004), Washington DC.
- 10. Panelist of the NSF (Invitations) Information & Intelligent Systems (IIS) Program Division (Computer & Information Science & Engineering (CISE)), Washington DC.
- 11. Reviewer for the National Institute of Standards and Technology (NIST US Department of Commerce) for their internal programs, Gaithersburg, Maryland.

UNIVERSITY/INDUSTRIAL BOARDS

1. Member of the Industrial Board of the Complex Systems Research Center of Carnegie Mellon University (sponsored by NSF), 2000-2001.

• Other activities

POLITICAL ACTIVISM

- 1. Advisor to the Senate of the Republic of Panama (1995-1997, 2004-2005, 2011- Present)
- 2. Attended United Nations Security Council Meetings (New York) related to Nuclear Research and Proliferation (1995) Advisor (Government of the Republic of Panama).
- 3. Member of the Initial Committee to study the policies to improve the Social Security System in the Republic of Panama (appointed by the President of the Republic of Panama) in 2004-2005.

SAMPLE OF PROFESSIONAL DEVELOPMENT (1993-2013)

- 1. Filmmaking and Production: April 7-8, 2013, Panama City, Republic of Panama.
- 2. SAP (Enterprise System Courses): IEM1054 PR REVIEW PROCESS, CORE FINANCIAL CROSS-FUNCTIONAL (FM-FI-MM-CO RELATIONSHIPS) OVERVIEW December 17-18, 2009, Kennedy Space Center.
- Project Management Courses: ETHICS TRAINING (2009), Identifying Project Risks; Approach to NPR 7120.7 (MODULE 1)
 PROJECT MANAGEMENT LITE/MEDIUM FRAMEWORKS, October 2009, Kennedy Space Center.
- 4. Human Research Protection Program, Huron Consulting Group, June 9, Orlando, FL, 2009.
- 5. "Agent-Based Simulation: A New Approach to Systems Modeling," Averill M. Law & Associates. Washington DC, 2008.

- 6. "Human Research Protection Programs in an Evolving Research Landscape," December 1-4, 2007, Boston, MA.
- 7. Local **UCF IRB Training Session** UCF, October 24, 2007.
- 8. Executive Education: **The Art and Practice of Leadership Development**. May 18-25, 2007. Harvard University, John F. Kennedy School of Government, Cambridge, 2007.
- 9. Forum: Challenges in Protecting Human Subjects in Research, February 2007, Florida Hospital Institutional Review Board.
- 10. Training Course: AnyLogic: Discrete-Event Simulation, Software Agents, Continuous Simulation, and System Dynamics, , Version 6.0, Orlando, February 2007.
- Course: CITI Course in The Protection of Human Research Subjects, Orlando, Florida, December 2006.
- 11. Course: A Practical Guide to HLA Programming, Distributed Simulation Technology Inc., Orlando, Florida, April 2006.
- 12. Course: **DMSO Modeling and Simulation Staff Officer Course**, Department of Defense, Orlando, Florida, July 2005.
- 13. Course: Faculty International Studies Summer Institute, University of Central Florida, Orlando, Florida, May 2005.
- 14. Course: SCOR Model 6.1 Supply Chain Council, Phoenix, Arizona, January 2005.
- 15. Courses to teach On-line/Internet/WebBased University Courses to Adults: 9a Jornada de Capacitación: "Diseño Visual", "Comunicación Educativa", and "Psicología y Educación de Adultos", Technological University of Panama, August 2004 to October 2004, using the Web.
- 16. Training Course: AnyLogic: Discrete-Event Simulation, Software Agents, Continuous Simulation, and System Dynamics, , Chicago, July 2004.
- Training Course: High Level Architecture and DMS Adapter, National Institute of Standards and Technology, Orlando, August 2003.
- 18. Training Course: Satellite Tool Kit, Analytical Graphics, Melbourne, August 2003.
- 19. Training Course: Intelligent Geographical Information Systems, Boeing Autometric, Orlando, May 2003.
- 20. Training Course: SPEEDES: Distributed Simulation, METRON Inc., Orlando, April 2003.
- 21. Workshop: Nuclear Power to go to Mars, MIT, Boston, January 2003.
- 22. Tutorial: Inside Discrete-Event Simulation Software, WinterSim, San Diego, California, December 2002.
- 23. Workshop: Human-Centered Computing, NASA Johnson Space Center, October 2002.
- 24. Tutorial: Unmanned Aerial Vehicles, WinterSim, San Diego, California, December 2002.
- 25. Seminar: Advanced in Robotics at MIT Draper Laboratories, MIT, Boston, January 2003.
- 26. Tutorial: Object Oriented Simulation Using JAVA, WinterSim, San Diego, California, December 2002.
- 27. Training Course: **IDL6543**, Office of Web Services, Fall 2002.
- 28. Seminar: Internationalization of Courses, University of Central Florida, Orlando, April-May 2002.
- 29. Seminar: H.NET Information Technologies, MIS University of Toledo, Cocoa Beach, March 2002.
- 30. Seminar: Data Mining in Financial Systems, Hyperion, Orlando, June 2001.
- 31. Seminar: WebCT, University of Central Florida, December 2001.
- 32. Course: Supply Chain Management and the SCOR Model Supply Chain Council, Chicago, June 2000.
- 33. Course: **Java and Interactive Programming** Department of Electrical Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts, June 1998.
- 34. Course: Advanced Neural Networks and Process Control, AspenTech, Pittsburgh, April 1998.
- 35. Course: **G2: Intelligent Objects and Multiple Inheritance**, Gensym Corporation, Cambridge, Massachusetts, March 1998.
- 36. Course: **Finite Scheduling and Supply Chain Using MILP,** Advanced Process Combinatorics, West Lafayette, Indiana, February 1998.
- 37. Course: Neural Networks and Process Control, AspenTech, Pittsburgh, 1997.
- 38. Course: Computer-Aided Multivariable Control System Design, Department of Electrical
- 39. Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts, June 1997.
- 40. Course: **G2 Part 2: Intelligent Objects and Multiple Inheritance**, Gensym Corporation, Cambridge, Massachusetts, March 1997.
- 41. Course: **G2 Diagnostic Assistant: Information Flow Diagrams and Diagnostic Procedures for Intelligent Operator Applications**, Gensym Corporation, Chicago, Illinois, January 1997.
- 42. Tutorials: (1) From Traditional Statistical Models to Neural Networks, (2) Reinforcement Learning, and (3) Challenges of Time Series Prediction, Natural Information Processing Systems, Denver, Colorado, December 1996.
- 43. Course: G2 Part 1: Intelligent real-time Systems, Gensym Corporation, Cambridge, Massachusetts, October 1996.
- 44. Course: Fuzzy Logic Inference, Intelligent Inference Systems Corp., San Francisco, California, 1996.
- 45. Tutorials: (1) **Neural Networks for Identification and Control,** (2) **Computational Learning and Statistical Prediction,** and (3) **Unsupervised Learning Procedures**, Natural Information Processing Systems, Colorado, November 1995
- 46. Course: AutoSched Scheduling System, AutoSimulations, Washington DC, August 1995
- 47. Course: FACTOR 5.2 Scheduling System, Pristker Corporation, Washington DC, July 1995
 - 48. Course: QUEST: The Simulation Language, Deneb Robotics, Washington DC, June 1995

- 49. NSF Sponsored Workshop, "Mechatronics," California Polytechnic Institute, California, June 1995
- 50. Course: Simulation with ARENA, Systems Modeling Corporation, Washington DC, May 1995
- 51. Tutorials: (1) Intelligent Data Modeling, (2) Neural Networks and Statistical Methods, St. Louis, Missouri, November 1994
- 52. NSF Sponsored Workshop, "Parallel Processing", Illinois State University, Illinois, June 1994
- 53. Tutorials: (1) From **Backpropagation to Neurocontrol**, (2) **Visual Pattern Recognition** with Neural Networks, and Short Course: **Genetic Algorithms**: Theory and Applications (INNS), San Diego, June 1994
- 54. Evolutionary Computation, Natural Selection, Inc., Sponsored by IEEE, California, April 1994
- 55. Tutorials: (1) Rapid Prototyping for Robotics and Automation (2) The Automated Factory of the Future, IEEE Robotics and Automation, San Diego, April 1994
- 56. L*.net Simulation Modeling of Local Area Networks (CACI), Arlington, Virginia 1993
- 57. Reinforcement Learning: A Machine Learning Workshop (University of Massachusetts), Amherst, Massachusetts, July 1993
- 58. **Neural Networks, Statistics,** and **Information Theory** in Sequence Analysis (Intelligent Systems for Molecular Biology-NIH), Bethesda, Maryland, June 1993
- 59. Automatic Data Collection and Bar Code Systems (Automatic Identification Manufacturers, Inc.), Athens, Ohio, May 1993
- **60. Berkeley Initiative for Soft Computing** (BISC) Extended Seminar (**Fuzzy Logic**), University of California, Berkeley, California, March 1993.

AWARDS Received by STUDENTS

- 1. Viet Trinh Best Honor Thesis in Technology in the University of Central Florida 2003
- 2. Fred Gruber Graduate Merit Fellowship Award for Graduate Studies at UCF (2003-2004).
- 3. Asisa Musa GEM Fellowship and Intel Fellowship (2003-2006)

OTHER SCHOLARLY ACTIVITIES - CONFERENCE AND SESSION CHAIRPERSON

- 1. Man-Machine Interface Committee Member for the SAE Aerotech Conference, Toulouse, France, 2011.
- 2. Session Chairman of the Winter Simulation Conference. Baltimore, Marylanad, December 2010.
- 3. Man-Machine Interface Committee Member for the SAE Aerotech Conference, Seattle 2009.
- 4. Man-Machine Interface Committee Member for the SAE Aerotech Conference, Los Angeles 2007.
- 5. Organizer of three sessions in Aerospace for the SAE Aerotech Conference, Los Angeles 2007.
- 6. Session Chair of "Aerospace Operations III", SAE Aerotech Conference, Los Angeles 2007.
- 7. Session Chair, "Methodologies to Tame Complexity" INFORMS, 2007, Rio Grande, Puerto Rico, July 2007.
- 8. Cluster Chair, "Complex and Dynamic Systems" INFORMS International, Puerto Rico, 2007.
- 9. Session Chair, "Winter Simulation Conference" 2006, Monterrey, California, December 2006.
- 10. Program Committee, "Winter Simulation Conference" 2005, Orlando, Florida, 2005.
- 11. Aerospace and Military Applications Track Coordinator, "Winter Simulation Conference" 2005, Orlando, Florida.
- 12. Organizer of the World Aviation Congress 2005 and organizer of the following sessions in space robotics and business intelligence.
- 13. Organizer of 4 sessions in "Aerospace Simulation and Modeling", "Ontologies in Simulation", and "Why System Dynamics" for the Winter Simulation Conference, 2005.
- 14. Program Committee, "IEEE International Conference on Service Operations and Logistics, and Informatics", 2005, 2006, 2007.
- 15. Session Chair, "Industrial Engineering Research Conference" 2006, Orlando, Florida, May 2006.
- 16. Session Chair, "Industrial Engineering Research Conference" 2005, Atlanta, Georgia, May 2005.
- 17. Session Chair, "Winter Simulation Conference" 2004, Washington DC, December 2004.
- 18. Session Chair, "World Aviation Congress" 2004, Reno, Nevada, November 2004.
- 19. Session Chair, "American Society for Engineering Management" 2004, Washington DC, October 2004.
- 20. Session Chair, "Industrial Engineering Research Conference" 2004, Houston, Texas, May 2004.
- 21. Organizer of the "Human-Centered Computing" Meeting from the NASA Intelligent Systems Program at UCF, October 2003.
- 22. Session Chair, "Winter Simulation Conference" 2003, New Orleans, Louisiana, December 2003.
- 23. Program Committee, "Information Systems Conference" 2002, Cocoa Beach, Florida, June 2002.
- 24. Session Chair, "Industrial Engineering Research Conference" 2002, Orlando, Florida, May 2003.

- 25. Session Chair, "Industrial Engineering and Management Systems Conference" 2002, Cocoa Beach, Florida, March 2002.
- 26. Program Committee, IAMOT, Miami Beach, Florida, 2002.
- 27. Conference/Symposium Chairperson with B. Mehta: "OAI Neural Net Symposium 1995", sponsored by the Ohio Aerospace Institute (OAI), NASA Lewis Research Center, Wright Patterson Air Force Base, and OU Research and College of Engineering, August 21, 22, 1995.
- 28. Support to the AI Cluster for INFORMS, New Orleans, and Session Chairperson with T. Velasco: (1)"Hybrid Intelligent Systems" and Session (2)"Applications Based on Soft-Computing Paradigms", October 1995.
- 29. Organizer with B. Mehta: (1) "Soft Computing", (2) "Adaptive Techniques," Eleventh International Conference of Mathematical and Computer Modeling and Scientific Computing, Washington DC, March 1997.
- 30. Session Chairperson and Organizer with B. Mehta: (1) "Artificial Intelligent Systems," (2) "Optimization Using Genetic Algorithms and Neural Networks," Tenth International Conference of Mathematical and Computer Modeling and Scientific Computing, Boston, MA, July 1995.
- 31. Member of the Organizing Committee: Adaptive Distributed Parallel Computing Symposium, Wright Laboratory and Wright State University, Dayton, Ohio, August 8-9, 1996.
- 32. Member of the Organizing Committee: Tenth International Conference of Mathematical and Computer Modeling and Scientific Computing, Boston, MA, July 1995.
- 33. Support to the AI Cluster for ORSA/TIMS Conferences and Session Chairperson: "Intelligent Systems Based on Soft Computing Paradigms," ORSA/TIMS Joint Meeting, Detroit, October 1994.
- 34. Session 5: Flexible Manufacturing Systems II, International Conference on Object Oriented Manufacturing Systems, Calgary, Canada, 1992.
- 35. Member of the IFIP Working Group Special Interest on Knowledge-Base Reactive Scheduling representing US.
- 36. Conference Organizer and Chairperson, Neural Networks Symposium and Workshop, Sponsored by NASA Lewis Research Center and Wright Patterson Air Force Base, 1995.

BOOKS, JOURNALS, CONFERENCES, RESEARCH PROJECTS REFEREEING

- 1. John Wiley & Sons, Inc. (MIS textbooks), 2004 Present
- 2. National Institute of Standards and Technology (**NIST**), 1992 Present.
- 3. National Science Foundation (NSF), 1992 Present.
- 4. Ohio Board of Regents, 1993 1996.
- 5. Ohio University Research Committee, 1993 1996.
- 6. Journal of Intelligent Manufacturing, 1990 Present.
- 7. International Journal of Production Research, 1991 Present.
- 8. European Journal of Operations Research, 1991 Present.
- 9. International Journal of Systems Automation, 1991 Present.
- 10. Mathematical and Computer Modeling and Scientific Computing Journal, 1992 2000.
- 11. Journal of Optimal Control Applications and Methods, 1992 Present.
- 12. International Journal of Computer Integrated Manufacturing, 1992 Present.
- 13. Interfaces (TIMS), 1993 Present.
- 14. Computers & Industrial Engineering: an International Journal, 1990 Present.
- 15. IIE Transactions, 1993 Present.
- 16. IEEE Control Systems Magazine, 1992 Present.
- 17. IEEE Transactions on Neural Networks, 1992 Present.
- 18. IEEE Transactions on Systems, Man, and Cybernetics 1992 Present.
- 19. IEEE Transactions on Robotics & Automation, 1994 Present.
- 20. IEEE Transactions on Engineering Management, 1994 Present.
- 21. Computers in Industry, 1993 Present.
- 22. International Journal of Computational Intelligence and Organizations, 1995 1996.
- 23. International Journal of Technology Management, 2004 Present
- 24. International Journal of Simulation and Process Modeling, 2004 Present
- 25. Communications of the ACM, 2004 Present
- 26. International Journal of Technology Marketing, 2005 Present
- 27. American Society for Engineering Management Conference, 2003- Present
- 28. International Transactions in Operations Research, 2005 Present
- 29. IEEE International Conference on Service Operations and Logistics, and Informatics, 2005 Present

- 30. SAE World Aviation Congress, 2004 Present
- 31. IEMS Conference, Cocoa Beach, 2002 Present
- 32. IEEE Conference on Control Applications, 1992 Present.
- 33. IEEE Decision and Control Conference, 1993 Present.
- 34. IEEE Robotics and Automation Conference, 1993 Present.
- 35. American Control Conference, 1993 Present.
- 36. Flexible Automation and Information Management Conference, 1992 Present.
- 37. Industrial Engineering Research Conference (IERC), 1993 Present.
- 38. ASEE International Conference, 2002 Present.
- 39. Winter Simulation Conference, 2003 Present.
- 40. IFIP 5.7 Advances in Production Management Systems, 2005 Present
- 41. International Journal of Simulation and Process Modeling, 2007 Present
- 42. International Journal of Production Economics 2009 Present
- 43. International Journal of Information Technology & Decision Making 2009 Present

SAMPLE OF PH.D DISSERTATION COMMITTEE MEMBERSHIPS

Student's	Dissertation Title	Current Status	Expected Defense	Other
Name			Term	Comments
Ian White	Analysis of Factors that Impact Hourly Employee Satisfaction and Customer Satisfaction: An Empirical Study	Passed Qualifying	Spring 2015	UCF
Eugenio Rodriguez	Assessing Effectiveness of Serious Games to Improve Training for Multinational Peacebuilding and Emergency Management Operations	Passed Proposal		UCF
Andreas Kuncaro				
Mohammed Alomairy	The effect of Baldrige program on organization's dynamic and innovation capabilities	Passed Candidacy		UCF
Abdullah Halawany	Design for Six Sigma as a Methodology to Assess Curriculum	Passed Candidacy		UCF
Joe Bass	Success in Technology Organizations	Defended Spring 2013	Completed	UCF
Saleh Al-Foraih	The Effect of Curriculum Organization on the Acquisition of Abstract Declarative Knowledge in Computer-Based Instructions	Defended Spring 2013	Completed	UCF
Robert Heilein	Improving the Military Blood Supply Network Through the Application of Netcentric Sense and Respond Techniques for	Passed Candidacy		UCF

	Distributed Adaptive			
Yanshen Zhu	Logistics Hybrid Optimization Method to Design Cellular Networks	Passed Qualifying		UCF
Chandre Butler	The Development of a Human-Centric Fuzzy Mathematical Measure of Human Engagement in Interactive Multimedia Systems Applications	Defended Spring 2010	Completed	UCF
Haluk Akin	Ontologies for Simulation and Optimization	Defended Spring 2009	Completed	UCF
Robert Beaver	Expertise, Collaboration and Organizational Learning in the AEC	Defended Summer 2009	Completed	UCF
Melissa Balderrama	Design of a Methodology to Elaborate Curriculo CIM of the Industrial Engineer in Spain based on QFD	Defended Fall 2008	Completed	Student from Ramon Lull Universitat in Barcelona, Spain
Ferreras, A.	A Comprehensive Multi- faceted Approach for Simultaneously Analyzing Critical Factors Related to Operational level Multi- Criteria Decision Making within Organizations	Defended Spring 2008	Completed	UCF
Dayana Cope	Ontologies and Supply Chain Management	Defended Summer 2007	Completed	UCF
Melissa Guzman	The Mediating Role of Motivation and Job Satisfaction in Work Environment-Outcome Relationships	Defended Summer 2007	Completed	Psychology Department (UCF)
Luis Beltran	Using Nonparametric Methods to Lower False Alarm Rates in Multivariate SPC	Defended Fall 2006	Completed	UCF
James Barnard	A Multi-View Framework for Defining the Services Supply chain using Object Oriented Methodology	Defended Fall 2006	Completed	UCF
Shalam, T.	Supply Chains Design for Make-to-Order	Defended Summer 2006	Completed	UCF
Jose Nunez	Knowledge Management in International Projects	Defended Summer 2005	Completed.	UCF
Carolyn Mizell	Quantitative Assessment of Software Development Project Management Issues Using Process Simulation Modeling with Continuous Simulation Element	Defended Summer 2006	Completed.	UCF
Mohamed Asiri	ISO 9000 in International	Defended	Completed	UCF

	Environments	Spring 2005		
Grant Cates	Managing Project	Defended Fall	Completed	UCF
	Completion Time	2004		
	Distributions with Discrete			
	Event Simulation			
Jose Sierra	Quality Constraint	Defended	Completed	UCF
	Approach	Spring 2004		
Sandra Furterer	A Framework for Lean Six	Defended Spring	Completed	UCF
	Sigma in Local Government	2004		
	Entities			
Gorana, Knezevic	Measuring Process Quality	Defended spring	Completed	UCF
		2004	_	
Jia, J.	A Methodology for Cold	Defended	Completed	Ohio University
	Rolling Processes	Fall 1997	_	
Ali, Zulfikar	Effects on Temperature	Defended	Completed	Ohio University
	Dependent Thermal	Fall 1995	_	
	Cylindrical Ingots			
Fang, Xuefeng	VLSI Design for Artificial	Defended	Completed	Ohio University
	Neural Vision Learning	Fall 1994	-	
	System			

SAMPLE OF M.S. THESIS COMMITTEE MEMBERSHIPS

Student's Name	Dissertation Title	Degree Program	Institution	Completion Date
Aboodi, M.	Lean Six-Sigma	IEMS	UCF	Spring 2014
Maher Al-Shamkhani	Managing, Controlling, and	IEMS	UCF	Spring 2013
	Improving the Treatment of			
	Produced Water Using the Six Sigma			
	Methodology for the Iraqi Oil Fields			
Ahmad, A.	Ontologies for Supply Chain	IEMS	UCF	Spring 2003.
	Management			
Sala-Diakanda, S	Comparison between Riveting and	IEMS	UCF	Spring 2003.
	Friction Stir Welding for Aircraft			
	Assembly - Aerospace			
Ismail, S.	Process Capability Analysis Using	IEMS	UCF	Spring 2002.
	Motorola's Six Sigma			
	Characterization Methodology			
Bakshi, G.	Comparison of Ridge Regression and	IMSE	Ohio	Winter 1996.
	Neural Networks for Modeling		University	
	Multicollinear Data			
Rajendran, V.	Coordinated Measuring Machines	IEMS	UCF	Fall 1995
Malkani, A	Implementing FuzzyARTMAP on a	ECE	Ohio	
	Hypercube (iPSC)		University	
Huang, Z.	Computer-Aided Modeling and	ME and	Ohio	Spring 1995.
	Simulation of Molecular Systems and	Biomolecular	University	
	Protein (WT-bGH) Structure	Engineering		
	Minimization			
Kanumury, R.	Integrating Business and Engineering	ECE	Ohio	Spring 1995.
	Processes in Manufacturing		University	
	Environments Using AI Concepts"			
Gautam, S.	Computer-Aided Modeling and	ME and	Ohio	Winter 1995.
	Analysis of the Human Femur	Biomolecular	University	

		Engineering		
Matta, V.	Prediction of Proteins Secondary	ME and	Ohio	Fall 1994.
	Structure using the Probabilistic	Biomolecular	University	
	Neural Network	Engineering		
Thomas, G.	Genetic Algorithms in Reliability	ISE	Ohio	Fall 1994.
	Engineering		University	
Rajani, S.	3-D Modeling and Finite Element	ME and	Ohio	Fall 1994.
	Analysis of the Tibia	Biomolecular	University	
		Engineering		
Roy, P.	Prediction of Proteins Secondary	ME and	Ohio	Summer 1994.
	Structure using FuzzyARTMAP	Biomolecular	University	
		Engineering		
Lanka, S.	Object-Oriented Simulation at Real-	ECE	Ohio	Spring 1994.
	Time for a Manufacturing Facility		University	
Yang, Y-W	Segmentation and Clustering in	ECE	Ohio	Winter 1994.
	Neural Networks for Image		University	
	Recognition			
Reddy, S.	Object Oriented Cell Controller for a	ECE	Ohio	Fall 1993.
	Manufacturing Shop Floor		University	
Soni, R.	Computer-Aided Modeling and	ME and	Ohio	Fall 1992.
	Simulation of Molecular Systems and	Biomolecular	University	
	Proteins Secondary Structure	Engineering		
Ansari, N.	Handwritten Character Recognition	ECE	Ohio	Summer 1992.
	by Using Neural Networks Based		University	
	Methods			
Lee, Y-G.	An Algorithm for Solving the TSP	ISE	Ohio	Summer 1992.
	with 3D Polygonal Barriers		University	
Lockesh, R	Prediction of Proteins Secondary	ME and	Ohio	Summer 1992.
	Structure	Biomolecular	University	
		Engineering		
Kellmeyer, D.	Detection of Highway Warning Signs	ISE	Ohio	Winter 1992.
	in Natural Color Images		University	
Chen, S	Development of a Neural Network	ISE	Ohio	Fall 1991.
	Based Software Package for the		University	
	Automatic Recognition of License			
	Plate Characters			

SAMPLE OF INDEPENDENT STUDIES AND DIRECTED RESEARCH (UCF, 2002 – PRESENT)

Student's Name	Topic	Term
Joe Pastrana	The Simulation Life Cycle	Summer 2010
Joe Pastrana	SysML and Hybrid Simulation	Spring 2010
Lo Tsai	Options Theory and Simulation	Fall 2009
Joe Pastrana	Hybrid Simulation for the Enterprise	Fall 2009
Mario Marin	Research about Patient Simulators and Ecology	Summer 2009
	of Infectious Diseases	
Jose Cintron	Research about Quantification of Knowledge	Summer 2009
	Using System Dynamics	
Jose Cintron	System Dynamics	Spring 2009
Jose Cintron	Knowledge and Engineering Economics	Fall 2008
Daisy Mueller	Complex Systems	Spring 2007

Gus Laurens	Foreign Project Management	Spring 2007
Yanshen Zhu	Object Oriented Simulation	Fall 2006
Yanshen Zhu	Object Oriented Simulation	Fall 2006
Jose Cintron	Knowledge Management	Fall 2006
Alfonso Sarmiento	Non-Linear Control Theory	Fall 2006
Haluk Akin	Ontology Design	Fall 2006
Gus Laurens	MIS and Industrial Marketing	Fall 2005
Gus Laurens	MIS and Industrial Marketing	Summer 2005
Mario Marin	Distributed Simulation and Integration	Summer 2005
Judy Mueller	MIS	Summer 2005
Asisa Musa	UAVs and Usability II	Spring 2005
Serge Sala-Diakanda	Blast and Debris Sensor Fusion	Spring 2005
Tarek Shaalan	Supply Chain Management	Spring 2005
Mario Marin	Distributed Simulation with HLA	Spring 2005
Asisa Musa	UAVs and Usability I	Fall 2004
Oscar Martinez	Cost and Operations	Fall 2004
Ping Chen	High Level Architecture	Fall 2004
Jeffrey Dawson	Usability of Distributed Simulation	Fall 2004
	Environments	
Fakir Noor-Mohideen	System Dynamics	Fall 2004
Vinay Rajendran	Coordinate Measuring Machines	Fall 2004
Hamid Eskandari	Optimization and Genetic Algorithms	Fall 2004
Fred Gruber	Support Vector Machines	Fall 2004
John Pastrana	Supply Chain Management and TALC	Fall 2004
Sergio Quijada	System Dynamics	Fall 2004
Serge Sala-Diakanda	Virtual Range	Fall 2004
Ahmad Rahal	Technology Transfer Frameworks	Summer 2004
Jeffrey Dawson	High Level Architecture	Summer 2004
Amani Saleh	Supply Chain Management	Spring 2004
Jaebok Park	Integration and Software Agents	Spring 2004
Jose Rivera	IT and Organizational Issues	Spring 2004
Hamid Eskandari	C++ Programming	Fall 2003
Magdy Helal	Hybrid Simulation	Fall 2003
Cesar Munoz	Options Theory	Fall 2003
Mayra Carrasquillo	Supply Chain Management	Fall 2002
Omar Thompson	System Dynamics	Summer 2003
Mario Marin	Advanced Artificial Intelligence	Summer 2003
Nabeel Yousef	Artificial Intelligence	Fall 2002
Mario Marin	Artificial Intelligence	Fall 2002
Ankit Shah	Supply Chain Management	Fall 2003
D. Lebo	MIS	Summer 2002
M. Woltman	MIS	Summer 2002

RECOGNITION AND AWARDS

TEACHING and INTERNAL RESEARCH AWARDS

- 1. Recipient of the UCF Teaching Incentive Program (TIP) Award 2006-2007 for outstanding teaching performance.
- 2. **Outstanding Professor** (Recipient of the Prize RUSS AWARD) College of Engineering and Technology Ohio University by College of Engineering and Technology Review, 1995-1996.
- 3. Industrial Engineering and Management Systems (IEMS) Department, UCF, Research Award, 2006-2007,
- 4. Industrial Engineering and Management Systems (IEMS) Department, UCF, Research Award, 2005-2006,
- 5. Industrial Engineering and Management Systems (IEMS) Department, UCF, Research Award, 2004-2005,
- 6. Industrial and Systems Engineering Department Outstanding Professor by ISE Undergraduate Students Review, 1995-1996.
- 7. **Industrial and Systems Engineering Department Outstanding Professor** by ISE Undergraduate Students Review, 1994-1995.
- 8. Industrial and Systems Engineering Department Outstanding Professor by ISE Undergraduate Students Review, 1991-1992.

SCHOLARSHIPS AND AWARDS

- 1. Meritorious Son and keys to the City of David (2013): Hometown and Second City in Importance in the Republic of Panama.
- 2. Society of Automotive Engineers (SAE) Forest R. McFarland Award 2013. Prof. Luis Rabelo received the Forest R. McFarland Award as outstanding session organizer and chair of Aerospace Operations technical sessions in the SAE 2011 Aerotech Congress & Exhibition (Toulouse, France). He has contributed to the success of this conference through manuscript reviews, and active planning, development and dissemination of information in eight Aerospace Operations technical sessions in this international meeting. His long-standing contribution has been accomplished and supported with outstanding enthusiasm since 2003.
- Engineers' Council: Distinguished Engineer Educator Award 2012. National level recognition and prize sponsored by NASA, ASEE, SWE, IEEE, and the Aerospace Industry. National Ceremony at Hollywood, California, 25 February 2012.
- 4. NASA KSC Group Achievement Award to 2nd Lunabotics Mining Competition Team (For exceptional teamwork from across the Agency for the successful orchestration of the Second Annual Lunabotics Mining Competion). 21 September 2011 (by Cheryl Hurst Kennedy Space Center).
- 5. **2011 Hispanic Engineer National Achievement Awards Corporation (HENAAC) Education Award winner.** HENAAC Award winners represent highly accomplished STEM professionals who have achieved both academic and professional success in their respective fields. The HENAAC Award highlights and honors these Hispanic success stories and provide this emerging and still largely untapped segment of our great nation's population access to these role models in order to motivate more students to pursue degrees.
- 6. NASA Group Achievement Award to Inaugural Lunabotics Mining Competition Team (For outstanding teamwork for the highly successful Lunabotics Mining Competition, engaging hundreds of students and partners in science, technology, engineering, and math). 30 June 2011 (by Charlie Bolden NASA Administrator).
- 7. NASA Recognition Award for his outstanding performance as a NASA Agency Project Manager of the Congress Mandate Experimental Program to Stimulate Competitive Research (EPSCoR). Dr. Rabelo has been the NASA EPSCoR Project Manager for the last two years (an Intergovernmental Personnel Act (IPA) Position) and he also received a mention in the NASA Authorization Act of 2010 by the US Congress of the higher performance of the Program.
- 8. Recipient of the Scholarship for **Distinguished Researcher of the Government from Catalunya, Spain**, 2009.
- 9. **Distinguished Alumni of the Technological University of Panama** 2008 (First Time that this yearly award was given).
- 10. Fulbright Scholar (US State Department) 2008-2009.
- 11. UCF Sabbatical Year 2008-2009 (75% FTE).
- 12. Recipient of the UCF Teaching Incentive Program Award 2006-2007 for outstanding teaching performance.
- 13. Dr. Rabelo received the Emerald Literati Network Awards for Excellence 2007. Every year Emerald invites each journal's Editorial Team to nominate what they feel has been that title's Outstanding Paper and up to three Highly Commended Papers from the previous 12 months. The paper "Simulation of range safety for the NASA space shuttle" published in Aircraft Engineering and Aerospace Technology: An International Journal was included among these and has been selected as a Highly Commended Winner at the Emerald Literati Network Awards for Excellence 2007. His paper was selected from 9,000 submissions (worldwide).

- 14. Dr. Rabelo received the award "Distinguished Alumni" given by the Technological University of Panama, November 2006 and "Favorite Son Chiriqui State" by the authorities of the Technological University of Panama in the state of Chiriqui.
- 15. Dr. Rabelo received the prestigious "<u>ONE NASA Award</u>" from NASA due to his research work in NASA Kennedy Space Center and NASA Ames Research Center. He received this award in the June 2006.
- 16. **Dr. Rabelo has received** the 2004 Arch T. Colwell Merit Award from the Society of Automotive Engineers (SAE). His paper A Distributed Environment for Analysis of Events Related to Range Safety, was selected from 2,677 research articles which were published for SAE meetings during 2004. Papers are judged for their value as contributions to existing knowledge of mobility engineering, and primarily with respect to their value as an original contribution to the subject matter.
- 17. Nominee (with Dr. Phillip Meade by NASA for the 2005 State of Florida's Governor's Award in Modeling & Simulation for the development of the Agents-based Workforce Climate Simulation Models. Other finalists for the Award were Lockheed-Martin Corp. and PEO STRI. Orlando, Florida, November 29, 2006.
- 18. The article "Disaster and prevention management for the NASA shuttle during lift-off", published in the journal Disaster Prevention and Management: an International Journal, Vol 12 No. 2, was one of only 10 noteworthy articles selected by the Managing Editors for inclusion in August 2006 Monthly Highlights on the Emerald website please see http://www.emeraldinsight.com/Insight//. Each month Emerald publishes on average 450 new research articles and case studies, and only 10 are featured in the Monthly Highlights.
- 19. Paper on "A Distributed Environment for Spaceports." It was judged and named by a panel of engineering experts as one of the most outstanding SAE technical papers of 2004.
- Nominee (with Dr. Jose Sepulveda) by NASA for the 2005 State of Florida's Governor's Award in Modeling & Simulation for the development of NASA Virtual Test Bed. Other finalists for the Award were Lockheed-Martin Corp. and PEO STRI. Orlando, Florida, November 29, 2005.
- 21. **Distinguished Research of the Industrial Engineering and Management Systems Department**, University of Central Florida, 2004, 2005, 2007.
- 22. NASA Fellow, National Aeronautics and Space Administration, 2002, 2003, 2004, 2005, 2008.
- 23. First Prize: Research Presentation Award: Internationalization of Research, 2002.
- 24. First Prize: Faculty Coach Advisor, International Competition of Business Plan, Florida International University, 2002.
- 25. Given Stock Options for Outstanding Performance in the Honeywell Technology Center, 1999-2000 (Top 25%).
- 26. Massachusetts Institute of Technology SDM Fellow, MIT, 2001
- 27. Who's Who in Science and Engineering (Marquis Selected by Peer Review) 1995, 1996, 1997.
- 28. Who's Who (Strathmore's Selected by Peer Review) 1996, 1997.
- 29. Award "Distinguished Alumni" given by the Technological University of Panama, September 1995.
- 30. Stocker ENT funds and Ohio Research Office, Ohio University, to attend workshops and organize conferences during 1991, 1992, 1993, 1994, and 1995 (\$10,000.00).
- 31. NSF and GERMAN Operations Research Society, to attend US and Germany Joint OR Conference in Hagen, Germany, 1992 (\$900.00).
- 32. Grant for Neural Networks Research and Process Control. Summer 1990 (\$4,000), from the State of Illinois
- 33. SME Gift Grant to attend Neural Networks and Manufacturing Clinic in Detroit, 1991 (\$700.00).
- 34. Dean of the School of Mines and Metallurgy Grant (UMR) to attend Systematic Course and Conference in Neural Networks at Boston University, 1991 (\$750.00).
- 35. Grants-in-Aid of Research Award from **SIGMA XI, The Scientific Research Society** to further research in Neural Networks and FMS, December 1989 (\$500).
- 36. University Faculty Grant to attend the 1990 National Communications Forum by NEC Information Industry Faculty Selection Committee (\$1,250).
- 37. Several UMR and industry grants (AT&T and IBM) to attend various short courses, seminars and conferences, 1988 1990 (\$3,000).
- 38. Grant for Summer Proposal Preparation, UMR Associate Dean for Research and Graduate Affairs, May 1990 August 1990 (\$5,000).
- 39. Honor Scholarship for graduate studies in Engineering Management at the University of Missouri-Rolla "Ricardo Galindo Quelquejeu" by Panamanian Society of Executives, 1987 (\$5,000).
- 40. Honor Scholarship for undergraduate studies in Engineering at the Technological University of Panama, 1978 1983 (\$7,000).
- 41. Gold Medal "Guillermo Andreve" for educational achievements in 1978 (given to 45 students from 12,000).

- 1. Universidad del Desarrollo (Santiago, Chile) Noticias http://ingenieria.udd.cl/noticias/2012/11/seminario-%E2%80%9Cexperiencias-de-simulacion-en-la-nasa%E2%80%9D/
- 2. **Canal 10 del Sistema Chiapaneco de Radio Televisión y Cinematografía** Reportaje acerca del Dr. Luis Rabelo Noviembre 2012.
- 3. Newspaper UCF Today (2011) http://today.ucf.edu/ucfs-rabelo-born-to-be-an-engineer-honored-nationally/
- 4. Dario Tribuna de Chiapas http://www.diariolatribunadechiapas.com.mx/index.php?option=com_content&task=view&id=16703
- 5. The major newspaper in the Republic of Panama, **La Prensa**: "Dos historias de superación", February 8, 2010. http://www.prensa.com/hoy/vivir/2085063.asp
- 6. The major newspaper in Chile, **El Mercurio**: "Gran convocatoria en conferencia de Ripley y Universidad Diego Portales", November 29, 2009. http://diario.elmercurio.cl/detalle/index.asp?id={2c606e66-6726-4b37-a629-7e9cc2417873}
- Epicentro Chiapas, Mexico, Web News, about Potential Academic Agreement between UCF and UNACH, April 8, 2009. http://epicentrochiapas.com/index.php?option=com_content&task=view&id=14547&Itemid=28 and http://issuu.com/chiapashoy/docs/estado080409
- 8. Central Florida Future (Newspaper): "UCF professors head overseas for Fulbright", February 2009.
- 9. UCF News Room, Florida Central: "UCF Fulbright Scholars to Study Teacher Education in Kenya, Near-Earth Asteroids and More", November 2008. http://news.ucf.edu/UCFnews/index?page=article&id=002400417681c879011d86dcaaa7007c9b
- 10. Panama America, Buscando Agua en la Luna, 2008: http://www.pa-digital.com.pa/periodico/buscador/resultado.php?story id=704503&texto=centauro#axzz0piiuMUrW
- 11. Newspaper in Mexico "El Heraldo de Chiapas", about work as Intern in NASA and NASA Fellow, November 16, 2008.
- 12. The major newspaper in Panama, **La prensa**, Reception in US Embassy for Astronaut Scott Parayznski, 2008. http://mensual.prensa.com/mensual/contenido/2008/10/08/hoy/sociales.shtml
- 13. Newspaper in Panama "Panama America", about the Phoenix Project, May 2008. http://www.padigital.com.pa/periodico/buscador/resultado.php?story_id=623145&page=2&texto=electromec%E1nica#axzz0pezeh6Zx
- 14. Mundo Social (Magazine in Panama): Interview with Dr. Rabelo, Review of "Science in NASA/Exploration."
- 15. El Tecnológico, Newspaper of the Universidad Tecnológica de Panamá, Edición: Octubre de 2006, "Reconocimiento a personalidades de la UTP en Chiriqui," October 2006.
- 16. TV 365, Icelandic Largest TV Network, Interview with Dr. Rabelo, October 2006, "International Trade Opportunities."
- 17. Morgunbladid (**Icelandic** Largest Newspaper), Interview with Dr. Rabelo, September 2006, "Expansion of the Panama Canal." http://www.mbl.is/mm/gagnasafn/grein.html?grein_id=1095881
- 18. La Prensa (Largest Newspaper in the Republic of Panama): Interview with Dr. Rabelo, September 2006, "With the Mind in the Universe." http://mensual.prensa.com/mensual/contenido/2006/09/02/hoy/panorama/718915.html
- 19. La Prensa (Largest Newspaper in the Republic of Panama): Interview with Dr. Rabelo, May 2006, "Expansion of the Panama Canal."
- 20. La Prensa (Largest Newspaper in the Republic of Panama): Interview with Dr. Rabelo, April 2006, "Globalization."
- 21. Mundo Social (Magazine in Panama): Interview with Dr. Rabelo, February 2006, "Science in NASA/Exploration."

- 22. http://www.sae.org/servlets/pressRoom?OBJECT_TYPE=PressReleases&PAGE=showRelease&RELEASE_ID=403
- 23. El Tecnológico, Newspaper of the Universidad Tecnológica de Panamá, Edición: Agosto de 2006, "Luis Rabelo, un exalumno distinguido," August 2005.
- 24. Telefutura/Univision (Largest Hispanic TV Network in North America (USA, Mexico, Canada)): Program about Universities and NASA and Interview with Dr. Rabelo, August 2005.
- 25. El Comercio (Largest Newspaper in the Republic of Peru): Announcement of Dr. Rabelo, October 2004.
- 26. La Prensa (Largest Newspaper in the Republic of Panama): (Semanario Ellas) Interview with Dr. Rabelo, October 2002.