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# **EDUCATION**

## **DEGREE: PH.D. ELECTRICAL ENGINEERING**

Institution: Florida International University, Miami, FL.

Dissertation Title: Encryption Based Security for ISDN Communication: Technique and Application

Field: Information Security and related technologies, Telecommunications, Computer

Engineering, Digital Signal Processing, and Systems and Controls.

Date: October 1994

#### **DEGREE: M.S. ELECTRICAL ENGINEERING**

Institution: University of Miami, Coral Gables, FL.

Field: Computer Engineering, Engineering Management, and Electrical Power. G.P.A. 4.0/4.0

(overall).

Date: May 1986.

## **DEGREE: B.S. ELECTRICAL ENGINEERING**

Institution: University of Miami, Coral Gables, FL.

Field: Computer Engineering. cum laude G.P.A. 3.81/4.0 (overall).

Date: May 1982.

## **CONTINUING EDUCATION COURSES:**

- Presidential Vocation and Institutional Mission, Council of Independent Colleges
- Crisis Leadership in Higher Education, Harvard Kennedy School.
- Institute for Management and Leadership in Education, Harvard Graduate School of Education
- IT for the non-IT Executive, Massachusetts Institute of Technology Sloan School of Management.
- Fundamentals of Finance for the Technical Executive, Massachusetts Institute of Technology, Sloan School of Management.
- Experiential Classroom VIII, Syracuse University.
- The Art and Craft of Discussion Leadership, Harvard Business School.
- Executive Information Systems, SAP.
- SPSS-Clementine Data Mining, SPSS.
- Oracle SQL and PL/SQL, and Oracle WebDB, Oracle.
- Sales Management Training, Mastering your Presentation Skills, Dale Carnegie.
- Recent Advances in Cryptography, George Mason University.

# FULL-TIME ACADEMIC EXPERIENCE

## ST. THOMAS UNIVERSITY

- Provost and Chief Academic Officer; October 2014 to June 2018
- Provided intellectual and academic leadership to the University's educational mission and vision. Worked collaboratively with all deans, faculty, staff and students in cementing the University in renewed scholarship, and identifying opportunities for growth in burgeoning fields.
- With a reputation for understanding and responding to today's marketplace demands, launched nineteen new degrees since 2014 across University at all levels (representing 17% of the 1,458 students in their cohort, as of the 2017 Census date):
  - 4 New Bachelor's degrees (representing 10% of the 940 students in their cohort): B.B.A.
     Cyber Security; B.S. Mathematics & Data Science; B.S. Nursing; and RN to BSN
  - 11 New Master's degrees (representing 28% of the 429 students in their cohort): M.S. Bioethics; M.S. Big Data Analytics; M.S. Biology for STEM Educators; M.S. Counseling Studies; M.A. Criminal Justice; M.S. Cybersecurity Management; M.S. Instructional Technology; M.S. Nursing with a Specialization in Advanced Family Practice; M.S. Reading;
    - M.S. Special Education with a Specialization in Autism Spectrum Disorder; and M.S. Trade and Logistics Management
  - **4 New Doctoral degrees** (representing 47% of the 89 students in their cohort): D.B.A. Information Security; D.B.A. Marketing; D.B.A. Sports Administration; and Ph.D. Practical Theology.
- Successfully established 11 graduate online programs at STU (representing 44% of the 1,081 graduate students, as of the 2017 Census date):
  - 10 New online Masters degrees: M.S. Educational Leadership; M.I.B. International Business; M.S. Big Data Analytics; M.S. Elementary Education; M.S. Instructional Technology; M.S. Reading; M.S. Special Education; M.S. Sports Administration; M.S. TESOL;
    - M.S. Trade & Logistics Management
  - 1 New online Doctoral degree: Ed.D. Leadership & Innovation
- These initiatives, coupled with a new branding and marketing strategy, helped bring about STU's first inflection point in enrollment in ten years, growing new on-ground UG students by 43% in 2017, and new on ground graduate students by 18% in 2016.
- Empowered admissions team to recruit new undergraduates with stronger academic profiles since 2014, reflecting a +.4 increase in average GPA (from 2.84 to 3.24), and +75 increase in average total SAT (Critical Reading + Math scores; from 890 to 965).
- Launched a new partnership with Catholic high schools in Florida, the Catholic Education Continuum, which provides schools with the latest college prep strategies and opportunities for students to complete the first year in college while in high school, and accelerate to graduation. This initiative increased the number of applications from Catholic high schools 94% (to 250 in 2017), increased the number of admits from those schools by 70% (to 168 in 2017) and increased the number of enrolled students by 58% (to 68 in 2017).
- Expanded our Dual Enrollment Program (by 14% since 2014, to 2,817 high school students) by engaging five additional Catholic high schools in Florida. Former Dual Enrollment students comprise nearly 12% of enrolled Fall 2017 undergraduates.
- Established the new Student Success Center with a focus on improving the students' retention and graduation rates, as well as a number of other related initiatives including professional advisors and summer tuition included in the annual tuition. These initiatives resulted in increased Fall-to-Fall retention from 79.3% in 2014 to 88.8% in 2017, 4-year graduation rates increased from 27.8% in 2014 to 33.5% in 2017 and 6-year graduation rates increased from 35.1% in 2014 to 42.7% in 2017. At the time, about one third of students graduated in three years.

- Established "Course Materials on Day 1" program with STU's bookstore vendor (Follett) to assure all undergraduates receive all course materials by the first day of each semester for a reasonable flat fee. Due, in part, to this initiative, an analysis of student grades and other metrics show a decrease in withdrawals and an increase in the number of "A" grades accompanied by a decrease in the number of "F" grades.
- Focused on every STU student becoming fully engaged in service learning, undergraduate research, and internships and involvement in community-based projects, ranging from collaborations with Haitian coffee growers in Port-de-Paix to the local community of Miami Gardens
- Managed University Marketing and Branding, Student Affairs, University Housing, Office
  of Information Technology, Enrollment Services and Student Success. Oversaw six
  deans (including the Law School), two associate provosts, the vice president for IT and the
  vice president for Enrollment and Students Services, as well as the office staff.
  Approximately 75% of the full-time employees are part of Academic Affairs.
- Made many structural changes aimed at improving business processes, resulting in increased student enrollment and retention and fostering a culture of service excellence. Made numerous investments in the IT Infrastructure to drive efficiencies, effectiveness and data-informed decision-making including: implementation of the entire Ellucian Enterprise Resource Planning architecture, Ad-Astra Scheduling, Starfish Predictive Advising, Voice-over-IP telephony, website content management and the use of predictive modeling in admissions.
- Launched the first degree program of study offered by an American university in Cuba: Master's in Management with a specialization in Social Entrepreneurship (Maestria en Gerencia a Traves de la Doctrina Social de la Iglesia Católica). The new cohort of 35 graduate students (with backgrounds in Engineering, Architecture, Law, and Theology among others) started in November 2016 and will conclude in February 2018. The program is taught mainly by STU faculty who travel to Santiago de Cuba every five weeks for in-person immersive sessions. Students complete the remaining part of the class online. This program is sponsored by the Archbishop of Santiago, Dionisio Garcia, and offered at the Seminary of Our Lady of Charity.
- Oversaw and managed the developments, assessments and quality improvements for all academic programs. Directly involved in SACSCOC re-accreditation efforts as well as professional accreditations for the schools of Business, Education, and Theology, as well as program accreditations for Nursing and Family Therapy. Successful accreditation review by the Association of Theological Schools (ATS). Successful accreditation review by the Commission on Collegiate Nursing Education (CCNE) for our nursing programs: BSN, RN to BSN and MSN in Family Nurse Practitioner.
- Served as member of the Steering Committee for the Consolidation conversations with Barry University. Co-led the work of the Faculty Vibrancy and Curricular Alignment Task Force, including the following subcommittees: Law School, Academic Core, Graduate and Professional, and Faculty. Also involved with the following Task Forces: Mission Vision Values, Budget and Capital Finance, Student Experience, Enrollment Management, Marketing Communications and Branding.
- Co-led a Voluntary Reduction in Personnel (VIP) initiative with the goal of reducing personnel expenses. Results: 22 people took the VIP package. Annual savings were \$900K first year, plus \$1.3 M thereafter, plus 29% in fringe benefits.
- Directly involved in increasing student activities to improve student satisfaction, as well as hiring a new food vendor, establishing an Einstein Bros. Bagels on campus and improvements by the textbook vendor.
- Brought LimeBikes, a bike-sharing vendor, to campus in January 2018.
- Directly involved in grants (federal and foundations) and private fundraising as part of the capital campaign, raising \$33M.
- Reflecting an institutional and personal mission, repurposed over 50 residence hall bedrooms to accommodate (with no-loan and grant-funded tuition, room and

board) 76 students from Puerto Rico and the U.S. Virgin Islands after Hurricanes Irma and Maria, unexpectedly resulting in \$900K revenue, while maintaining a continuity of education for these students. STU was the first institution in the U.S. able to enroll these students into credit-bearing courses within four weeks of Hurricane Maria's landfall. STU was the first mainland university to reach out to Puerto Rican students with an offer of free room and board, books and generous scholarships for displaced students. The initiative received support from the Knight Foundation (\$250K), Carnegie Foundation (\$150K), Metz food services (free board, value \$380K), Follett (free book rental, value \$57K).

- Established Apple partnership with STU (through iPad program, Apple Professional Learning, Apple Teacher badging and Apple-driven innovation infrastructure enhancements), revolutionizing curricular content, professional development and student readiness for 21<sup>st</sup> century skills and careers at all STU schools and degree levels.
- Worked with the Registrar, Financial Aid and Admissions to standardize academic semesters (streamlining logistics and mitigating overlapping academic and operational redundancies, by reducing the number of embedded terms each semester from 80+ to fewer than
  - 5) and to align Administrative Withdrawal policies with key academic calendar dates based on outstanding student balances (to be compliant with federal financial aid and enrollment reporting guidelines, while simultaneously decreasing institutional "bad debt").

## FLORIDA INTERNATIONAL UNIVERSITY - 20 YEARS

- Vice President, Office of Engagement; May 2012 to October 2014.
- Member of the President's Executive Team. The office provided leadership for the development and coordination of partnerships at the local, state, national and international levels with the goal of aligning FIU's instructional, research and creative initiatives with local and global needs and priorities.
- Oversaw the following initiatives:
  - ACCESS: an achievement-oriented partnership between FIU and Miami-Dade County Public Schools (MDCPS) to align the two institutions' combined instructional, research and creative talents to improve MDCPS students' success, increase high school graduation and promote college transition. Key achievements include expansion of the Dual Enrollment program to over 6500 students, 113 courses and 33 schools. Also coordination of 19 workgroups associated with this partnership that cover aspects of articulation, pre-collegiate preparation, STEM initiatives, teacher preparation and development, clinical internships, collaborative research, arts and culture, disruptive behavior, violence prevention and collaborative fundraising, among others.
  - The Education Effect: a university community school partnership designed as a long-term commitment to support educational achievement and community development in Liberty City. Funded through a \$1.7M gift from JP Morgan Foundation, this initiative is a collaboration with the community, schools, students and parents. It aligns university expertise, resources and research-based intervention to address the pressing educational and social needs of students at Miami Northwestern Senior High (MNW) and its feeder schools. The Education Effect engages partners throughout Liberty City, one of the most economically disadvantaged neighborhoods in Miami-Dade County, where students face some of the worst academic, social, health and safety outcomes in the country. In one year the partnership tripled the number of students participating in dual enrollment courses, established the FIU Golden Scholars bridge program to support low-income MDCPS students and quadrupled the number of MNW students admitted to FIU. Similarly launched the Education Effect at Booker T Washington High School in Overtown through a \$1.0M gift by the Lennar Foundation.
  - Internships: Coordinated internships across the university, both academic and cocurricular across all the academic units and the career services staff. Actively increased the number of opportunities available to students by working with the private sector, local and federal government. Launched the first international internships.

- Life Sciences South Florida: a collaboration of 16 institutions in South Florida, including
  three public and two private universities, four community colleges, three economic
  development units, and two research institutes which aims to establish an industry cluster
  in South Florida focused on life sciences, biotechnology, pharmaceuticals, diagnostics, and
  information technology. Launched the Shared Resources Portal, the Undergraduate
  Student STEM Research Conference and Monthly Webinars.
- One Community One Goal (OCOG) Academic Leaders Council: supported the president
  on leading an effort to align the university's initiatives to Miami-Dade's focused set of target
  industries whose investment spark economic growth across the country. The mission of the
  Academic Leaders Council within One Community One Goal is to monitor and report
  progress and new developments in curriculum and programming that align with the new
  OCOG Target Industries, Entrepreneurship and Innovation.
- Fostering Panther Pride: a program to support foster homeless youth at FIU, funded initially through grants by the Miami Coalition for the Homeless (\$24K), the Miami Foundation (\$15K), Voices for Children (\$10K), and Educate Tomorrow (\$50K over 2 years). The program included a dedicated College Coach, a Mentor Program and Scholarships (\$100K over 5 years through a private donor). The State of Florida later funded this initiative via a recurring \$300K state appropriation to FIU to cover needed services for students participating in this program.
- One Community One Goal Talent Development Network: a multi-institution internship portal that serves students from all universities, colleges and high schools in South Florida.
- Also launched the following new initiatives: Air Force Mentor Protégé grant (\$82K),
  Health Effect at Liberty City, and the application for FIU to gain the recognition of Ashoka
  Changemaker Campus.
- Selected to participate in Harvard's Graduate School of Education, Institute for Management and Leadership in Education in June 2012
- Vice Provost, Academic Affairs: January 2011 to May 2012
  - Duties included setting overall academic priorities, overseeing university-wide implementation of student-centered initiatives and maintaining academic policies, including those affecting faculty and instructor appointments and development, such as third-year tenure faculty reviews and instructor/lecturer promotion. Also work closely with the deans and department chairs. Day-to- day responsibilities include interviewing candidates who may receive tenure as a condition of appointment, approving dual degree programs with university partners, Outside Activities/Conflict of Interest, and Change of Grades, among others. Served as the Provost's Office liaison to the Research Foundation. Launched the following initiatives:
    - Co-Chair FIU Math Initiative: improve students' passing rates of College Algebra and student performance in subsequent courses, including in STEM. Initiative focused on Math student success, which proposed a new pedagogical approach to teaching lower level mathematics using technology and student learning assistants. Prior to this initiative only about one third of the students passed College Algebra, and the goal was to increase this number to about 70%, based on the success of similar initiatives at other universities. We prototyped this reform in Spring 2012, and the initiative rolled out in Fall 2012 to serve over 2000 students each semester.
    - Co-Chair FIU Writing Initiative: improve undergraduate students' writing and critical thinking through implementation of a Writing Across the Curriculum initiative at FIU that includes: Writing in the Discipline (identify one course per major to become writing intensive), Writing in the Humanities (review impact on student writing through designated courses in the humanities) and Technology Component (develop technological resources in support of the faculty and students involved in this initiative). Initiative was prototyped in Spring 2012 and rolled out Fall of 2012.

- Co-Chair Minority PhD Initiative: increase the number of minority students pursuing PhDs at FIU in particular in STEM areas through recruitment, scholarships (via NSF Bridge to Doctorate Program), and mentoring.
- Chair, Search and Screen CIO
- Chair, Search and Screen VP Student Affairs
- Program Co-Chair (and Founder), 2011 Americas Venture Capital Conference: www.americasvcconference.com, premier venue for innovative and emerging companies from South Florida and Latin America to attract venture capital investors. The companies that presented at the AVCC in 2010 attracted in excess of \$40M in venture investment in one year. Over 350 in attendance. Biltmore Hotel, Miami; November 16-17th, 2011.
- Other Projects: Analysis and dissemination of the results from the 2010 National Survey of Student Engagement, Improve Faculty Satisfaction, "Making the Deans Successful" a standardization task force on the use of web-based survey instruments and student response systems (clickers), rollout of the online outside activity form, increasing the number of faculty awards, Book Authors reception and creating a marketing strategy directed to students, parents and counselors on why early graduation is cost-beneficial to students
- Ph.D. Students: Advisor: Jose Rocha (A Study on Uncertain Dynamic Disaster Management Tasks, Knowledge Sharing, and Task Performance; Defense: April 29, 2011).
   Committee member: Carlos Albornoz (Exploring the Goals, Content and Methods of Entrepreneurship Professors: A Multiple Case Study; Defense: November 8, 2011).
- Director and Fellow, Pino Global Entrepreneurship Center. June 2009 to January 2011
  - Redesigned the mission, vision and strategy for the Center. The mission of the Center is to create entrepreneurial leaders and organizations in all segments of society, throughout South Florida and internationally. We provide the FIU community of students, alumni, and professionals with the knowledge and contacts that enable them to reach their entrepreneurial objective of designing and launching successful new ventures based on innovative concepts. Its vision is to be a recognized international leader in entrepreneurship research, education, and outreach, as well as to be ranked among the nation's top entrepreneurship centers.
  - Developed the Pino Global Entrepreneurship Center Strategy: based on the concept of four I's: International, Innovation, Inflection Point, and Involvement
  - Developed a plan to return the Center to self-sustainability, including four advisory board groups who support the Center's mission: Advisory Board, Corporate Board, Family Business Forum and Friends of the Center. Raised \$40.5K (2009) in advisory board dues.
  - Raised \$500K from Cisneros Foundation towards the Center Endowment.
  - Raised the following funds in support of Center Operations and Research initiatives:
    - \$582,264 from Kauffman Foundation
    - \$129, 012 from South Florida Workforce
    - \$107,976 from the National Science Foundation
    - \$42,000 from Digicel Group
    - Americas Venture Capital Conference: approximately \$50,000 from sponsorships, \$45,000 for prizes, and \$50,000 in conference registrations.

- o Launched the Following New Initiatives:
  - The Americas Venture Capital Conference: <a href="mailto:americasvcconference.com">americasvcconference.com</a> Founder and program Co-Chair of the premier forum that features the "stars" among emerging ventures. Held during Global Entrepreneurship Week, private equity, institutional investors and large firms seeking strategic partners were in attendance. Over 300 in attendance. FIU campus, November 17-18, 2010.
  - Global Innovative Ventures Knowledge Base: GIVe KB give.fiu.edu a clearinghouse to match emerging innovative companies from both South Florida and Latin America with established firms seeking to develop strategic alliances and grow their operations. The GIVe knowledge base focuses on specific industries including: Agriculture, Biotechnology, Consumer Products, Green Technology and Energy, Entertainment, Information and Web Technology and Metals and Mining.
  - **iEntrepreneurship Lab:** students enrolled at FIU's leading international graduate business programs collaborate with students of Latin American university affiliates to perform an initial due diligence analysis of emerging firms.
  - Venture Mentor Service (VMS): modeled after MIT's successful VMS, this program supports innovation and entrepreneurial activity by matching prospective entrepreneurs with a group of professional, volunteer mentors in order to increase their probability of success.
  - Family Business Forum: a private forum for established family-owned businesses in South Florida focused on supporting their specific needs and addressing their unique obstacles for sustained growth.
- Redesigned and continued to support the following activities:
  - Entrepreneurship Workshop Series: a series of fast-paced, rigorous workshops that focus on practical tools and knowledge from experts in various fields of business.
  - Entrepreneur's "HOW TO" Webinar Series: a series of training sessions led by experts made accessible to a world-wide audience and broadcast via the web.
  - Entrepreneur Challenge Business Plan Competition: an annual business plan competition ran in collaboration with the Miami Herald, designed to provide a platform to showcase new ideas, while providing a forum to attract investment for their innovative business models.
- Full Professor, College of Business Administration, Miami, FL; August 2009
  - Elected as the Americas Region Representative to the Association for Information Systems Executive Council. April 2009.
  - Competitively selected as visiting scholar at the MIT Sloan School of Management Center for Information Systems Research (CISR). Spring 2009. Collaborated with CISR researchers on projects related to the management and use of information technology (IT) in complex organizations. CISR was established in 1974 to develop concepts and frameworks to help executives address the IT related challenges of leading increasingly dynamic, global and information intensive organizations.
  - Courses taught: Management of the Information Systems Function, Knowledge Management.
- Associate Professor, College of Business Administration, Miami, FL; August 2003 August 2009.
  - o Knight Ridder Research Professor. August 2006 to August 2009.
  - o MIS Ph.D. Program Coordinator. June 2007 to August 2009.
  - Faculty Director for the Masters of Science in Management Information Systems (MS MIS). 2003-August 2009. Formed the industry lead MS MIS Advisory Board in 2003. Lead the AACSB curriculum review in 2006. Implemented a new curriculum in 2007. Implemented Professional Development Seminars in 2006. Implemented Lunch and Learn seminars in

- 2006. Student satisfaction increased from 7.0/10.0 to 9.0/10.0 during my tenure as director.
- Kauffman Entrepreneurship Professor. 2007. Competitively selected to receive a grant from the Kauffman foundation to foster entrepreneurial activities, research, and disciplinebased courses.
- Founder and Director of the Knowledge Management (KM) Lab June 1997 to Present. The charter of the KM Lab, located at Florida International University's (FIU) College of Business Administration, is to research and evaluate the practices, processes and technologies that are being used in the field of knowledge management. Directed two Ph.D. students on the topic of disaster management at the Miami-Dade Operations Center and how knowledge integration and knowledge sharing mediates the relationship between disaster response task characteristics and task performance. Primarily NASA, NSF and the Air Force Research Lab funded the research activities of the students working at the KM Lab.
- Ph.D. Students: Advisor: Arvind Gudi (Effective Knowledge Integration in Emergency Response Organizations; Defense: November 19, 2008). Committee member: Sheng-Ying Tseng (2009), Guillermo Garcia-Tunon (2008), Susan Clemmons (2005).
- Sabbatical Appointment to NASA Headquarters, Washington DC. September 2004 –
   September 2005. Principal Investigator: "Development of an Integrated Knowledge Management Strategy for NASA," funded by Mr. James Jennings, Deputy Administrator for NASA.
- Honors College Fellow, February 2005.
- Courses taught: Management of the Information Systems Function, Knowledge Management, Data Mining and Knowledge Management, Organization Information Systems and e-Business, Managing in the Digital Age. Taught in the following programs: Master's of Science in M.I.S., M.B.A. for Program Managers, Masters of International Business, and Evening M.B.A.
- Assistant Professor, College of Business Administration, Miami, FL; August 1998 to August 2003.
  - Collaborated to develop and implement the MS MIS.
  - o Founder and Director of the Knowledge Management (KM) Lab (<a href="www.kmlab.fiu.edu">www.kmlab.fiu.edu</a>)
    June 1997. The charter of the KM Lab, located at Florida International University's (FIU)
    College of Business Administration, is to research and evaluate the practices, processes and technologies that are being used in the field of knowledge management. Primarily NASA and the Air Force Research Lab funded the research activities of the students working at the KM Lab. More than 60 undergraduate and graduate students have staffed the Lab.
  - Courses taught: Knowledge Management, Organization Information Systems and Introduction to Information Systems. Taught in the following programs: Master's of Science in MIS, Master's of International Business and Evening M.B.A.
- Visiting Professor, College of Engineering, Miami, FL; August 1997 to August 1998
  - Developed and implemented the Masters of Science in Engineering Management (M.S.E.M.) at FIU College of Engineering, including curriculum, course design, student advising and marketing the program. Teaching and research faculty of the M.S.E.M. program.
  - Courses taught: Engineering Management, Advanced Industrial Information Systems, and Advanced Engineering Project Management.
  - Designed and implemented the M.S.E.M. Decision Room, the first laboratory to support the M.S.E.M. Program.
- Director, External Programs, College of Engineering, Miami, FL; August 1996 to August 1997.
  - Director for the FIU College of Engineering, Florida Engineering Education Delivery System (FEEDS), the distance learning educational network of the State University System and the

NASA Industry Outreach programs (STAC and SCUI). Directed all aspects of the FEEDS program, including its promotion at local industries, participation in the Regional Advisory Board and State Systems Operations Committee. Helped promote and coordinate the Masters of Science in Engineering Management. Served as visiting faculty for the Advanced Industrial Information Systems course and the Advanced Project Management course.

Area Director, Southern Technology Applications Center (STAC) – University Florida, College of Engineering, December 1994 to August 1996.
Assisted local companies with the design and integration of technology by locating, assessing, acquiring and utilizing technologies and expertise within the Federal Laboratories and State University System. Assisted NASA by assessing their intellectual properties in the areas of Energy, Scientific Instrumentation, and Electronic Component Manufacturing, from the technical and the market potential point-of-view. Consultant to NASA Marshall Space Flight Center on the use of Internet/ISDN for the dissemination of Technology Transfer Agreements. Founded the FIU Engineering Mentor Program, a University-Industry joint venture with the goal of increasing the retention rate of students in the areas of Engineering and Sciences, by providing an early experience in the working environment.

# PART-TIME ACADEMIC EXPERIENCE

Institution: Florida International University, Miami, FL; Rank: Research Assistant and Adjunct Professor. Dates: May 1990 to December 1994. Research on Integrated Services Digital Networks (ISDN) and Cryptography. Dissertation: "Encryption Based Security for Public Networks: Technique and Application" which is aimed at providing a state-of-the-art solution to the problem of privatizing a public network. Implementation of the ISDN Research Lab, a project partially funded by Southern Bell and Northern Telecom. Adjunct professor: taught Computer Design.

# NON-ACADEMIC EXPERIENCE

Place of Employment: Florida Power and Light; Title: Engineer I and Techniques I Instructor. Dates: July 1983 to May 1990. Miami, FL. Coordinate all activities associated with the Quality Improvement Program as Power Supply Department Facilitator, for the 400 employees in the department. Earned a letter of commendation and the highest evaluation of 120% from Bob Tallon, FPL President, for efforts in the Quality Improvement Program. Responsible for the support, enhancements, and user interface for the computer functions in the System Control Center, which monitor the security and forecast possible interruptions to the power system. Designed and developed the first mainframe-to-PC-interface in the System Control Center for accounting purposes. Prepared and taught an intensive one-week course in Statistical Quality Control and its application to the Quality Improvement Program at FPL. Presentations to IEEE, Society of Women Engineers, Control Data Corporation user's meeting.

# PUBLICATIONS IN DISCIPLINE

#### BOOKS:

- 1. Sabherwal, R. and Becerra-Fernandez, I. (2010) *Business Intelligence: Practices, Technologies, and Management* (2010). Publisher: Wiley, Hoboken, NY, USA. ISBN-13: 978-0470461709.
- 2. Becerra-Fernandez, I. and Sabherwal, R. (2010) *Knowledge Management: Systems and Processes* (2010). Publisher: M. E. Sharpe, Armonk, NY, USA. ISBN-10: 076562351X
- 3. Becerra-Fernandez, I. and Leidner, D. [eds] (2008) *Knowledge Management: En Evolutionary View of the Field*. Published in the series Advances in Management Information Systems, edited

- by Vladimir Zwass, series editor. Publisher: M. E. Sharpe, Armonk, NY, USA. ISBN: 978-0-7656-1637-1.
- 4. Becerra-Fernandez, I., Gonzalez, A., and Sabherwal, R. (2004) *Knowledge Management: Challenges, Solutions, and Technologies*. Publisher: Prentice Hall, Upper Saddle River, NJ, USA. ISBN: 0-13-101606-7.

# PAPERS IN REFEREED PROFESSIONAL JOURNALS: (\*DENOTES PREMIER, S DENOTES STUDENT CO-AUTHOR)

- 1. Beath, C., Becerra-Fernandez, I., Ross, J. and Short, J. (2012) Finding Value in the Information Explosion. *Sloan Management Review*. 43(4). 18-20.
- 2. Xia, W., Becerra-Fernandez, I., Sudi, A. and Rocha, J. Emergency Management Task Complexity and Knowledge Sharing Strategies. *Cutter IT Journal*, January 2011.
- 3. Becerra-Fernandez, I., Elam J., and <sup>s</sup>Clemmons, S. Reversing the Landslide in Student Enrollments in Computer-Related Degree Programs. \*Communications of the ACM. 53 (2) 127-133.
- 4. Hoffman, R., Ziebell, D., Fiore, S., and Becerra-Fernandez, I. (2008) Knowledge Management Revisited. *IEEE: Intelligent Systems*, 23(3) 84-88.
- 5. Becerra-Fernandez, I. and <sup>s</sup> Gudi, A. An Experiential Approach to Teaching Knowledge Management. (2008) *International Journal of Teaching and Case Studies (IJTCS)*, special Issue on: "Teaching Knowledge Management: Integration into Curriculum, Teaching Strategies and Teaching Case Studies," 1 (3), 171-188.
- 6. Becerra-Fernandez, I., Cousins, K., Weber, R. (2007) Nomadic Context-Aware Knowledge Management Systems: Applications, Challenges, and Research Problems. *International Journal of Mobile Learning and Organisation*, 1(2) 103-121.
- 7. Kumar, K. and Becerra-Fernandez, I. (2007) Interaction Technology: Speech-Act Based Information Technology Support for Building Collaborative Relationships and Trust. *Decision Support Systems*, 43(2), 584-606.
- 8. Becerra-Fernandez, I. (2006) Searching for Experts on the Web: A Review of Contemporary Expertise Locator Systems. \*ACM Transactions on Internet Technology. 6(4), 333-355.
- 9. Becerra-Fernandez, I., Del Alto, M. and Stewart, H. (2006) A Case Study of Web-based Collaborative Decision Support at NASA. *International Journal of e-Collaboration*. 2(3), 49-63.
- 10. Sabherwal, R. & Becerra-Fernandez, I. (2005) Integrating Specific Knowledge: Insights from the Kennedy Space Center. \*IEEE Transactions on Engineering Management, 52(3), 301-315.
- 11. Becerra-Fernandez, I., Wang, T., Agha, G., Sin, T. (2005) Actor Model and Knowledge Management Systems: Social Interaction as a Framework for Knowledge Integration. *Lecture Notes in Computer Science*, 3782, 19-31.
- 12. Becerra-Fernandez, I., Murphy, K., and Elam, J. (2005) Successfully Implementing ERP: The IBM Personal Systems Group Experience. *International Journal of Internet and Enterprise Management*, 3(1), 78-97.
- 13. Becerra-Fernandez I. and Sabherwal R., (2005) Knowledge Management at NASA-Kennedy Space Center. *International Journal of Knowledge and Learning*. 1(1/2). 159-170.
- 14. Zanakis, S. and Becerra-Fernandez, I. (2005) Competitiveness of Nations: A Knowledge Discovery Examination. \*European Journal of Operations Research, 166(1), 185-211.
- 15. Elam, J. and Becerra-Fernandez, I. (2003) MetalSpectrum: A Virtual Marketplace for Brick-and-Mortar Products. *Journal of Information Systems Education (JISE*), 14 (3), 285-292.
- 16. Sabherwal, R. & Becerra-Fernandez, I. (2003) An Empirical Study of the Effect of Knowledge Management Processes at Individual, Group, and Organizational Levels. \*Decision Sciences, 34 (2), 225-261.
- 17. Becerra-Fernandez, I., Zanakis, S., & Walczak, S. (2002) Knowledge Discovery Techniques for Predicting Country Investment Risk. *Computers & Industrial Engineering*, 43(4), 787-800.
- 18. Becerra-Fernandez, I., & Sabherwal, R. (2001). Organizational Knowledge Management Processes: A Contingency Perspective. \*Journal of Management Information Systems, 18(1), 23-55.

- 19. Becerra-Fernandez, I. (2001) Identifying Potential Markets for the Intellectual Property at Kennedy Space Center and Initial Results. *International Journal of Technology Transfer and Commercialisation*. 1(1/2/3), 1-16.
- 20. Welty, B., & Becerra-Fernandez, I. (2001). Managing Trust and Commitment in Collaborative Supply Chain Relationships. \*Communications of the ACM, 44(6) 67-73.
- 21. Becerra-Fernandez, I., & Stevenson, J. M. (2001). Knowledge Management Systems and Solutions for the School Principal as Chief Learning Officer. *Education*, 121(3), 508-518.
- 22. Weber, R., Aha, D.W., & Becerra-Fernandez, I. (2001). Intelligent Lessons Learned Systems. *Expert Systems with Applications*, 20(1), 17-34.
- 23. Becerra-Fernandez, I. (2001) Locating Expertise at NASA Developing a tool to leverage human capital. *Knowledge Management Review*, 4(4), 34-37.
- 24. Becerra-Fernandez, I. (2000). The Role of Artificial Intelligence Technologies in the Implementation of People-Finder Knowledge Management Systems. *Knowledge Based Systems*, 13(5), 315-320.
- 25. Becerra-Fernandez, I., Taylor, A., Buckingham, G., Brown, D., Entessari, A., & Kinney, F. (2000). The NASA/Florida Minority Institution Entrepreneurial Partnership An Infrastructure to Enable Technology Transfer to Small Businesses. *Journal of Technology Transfer*, 25(2), 193- 203.
- 26. Becerra-Fernandez, I., Murphy, K., & Simon, S. (2000). Integrating ERP in the Business School Curriculum. \*Communications of the ACM, 43(4), 39-41.

## PAPERS PUBLISHED IN NATIONAL AND INTERNATIONAL REFEREED CONFERENCE

**PROCEEDINGS:** (S DENOTES STUDENT CO-ATUHOR)

- 1. Xia, W, Irma Becerra-Fernandez, <sup>S</sup> Jose Rocha, and Arvind Gudi, Knowledge Management Task Complexity In Emergency Management: An Instrument Development. Presentation and Conference Proceedings of the 2010 Americas Conference on Information Systems, Lima, Perú, August 12-15, 2010
- 2. S Nikolai, C., Johnson, T., Becerra-Fernandez, I., and G. Madey (2010). Leveraging WebEOC in Support of the Haiti Relief Effort: Insights and Recommendations. The 7th International Community on Information Systems for Crisis Response and Management (ISCRAM) Conference, Seattle, WA.
- 3. S Nikolai, I. Becerra-Fernandez, M. Prietula, and G. Madey. Project Ensayo: Designing a Virtual Emergency Operations Center. IEEE International Conference on Systems, Man, and Cybernetics, San Antonio, Texas, October, 2009.
- 4. SRocha, J., Irma Becerra-Fernandez, Weidong Xia, and Gudi, A. Dealing with Task Uncertainty in Disaster Management: The Role of Knowledge Sharing for Exploration and Exploitation. Presentation and Conference Proceedings of the 2009 Americas Conference on Information Systems, San Francisco, California, August 6-9, 2009.
- 5. Becerra-Fernandez, I., Xia, W., <sup>s</sup> Gudi, A., <sup>s</sup> Rocha, J. Task Characteristics, Knowledge Sharing and Integration, and Emergency Management Performance: Research Agenda and Challenges. Presentation and Proceedings of the of the 5th International Conference on Information Systems for Crisis Response and Management (ISCRAM), Washington, DC, USA, May 2008.
- 6. Becerra-Fernandez, I. Prietula, M., Madey, G., Rodriguez, D., Valerdi, R., Swright, T. Design and Development of a Virtual Emergency Operations Center for Disaster Management Research, Training, and Discovery. Presentation and Proceedings of the 41st Hawai'i International Conference on System Science (HICSS 2008), January 2008, Big Island, Hawaii.
- 7. Becerra-Fernandez, I. Prietula, M., Madey, G., Rodriguez, D. Project Ensayo: a Virtual Emergency Operations Center for Disaster Management Research, Training, and Discovery. (Best Paper Award). Presentation and Proceedings of the IEEE First International Conference on Global Defense and Business Continuity (ICGDBC 2007), July 2007, San Jose, CA.
- 8. S Liu, C., Rama, D., Becerra-Fernandez, I. The Proposal of Conditions of Personal Engagement in Knowledge Harvesting. Proceedings of the IEEE International Conference on e-Business Engineering (ICEBE), October 2007, Hong Kong, China.

- 9. Becerra-Fernandez, I. and Prietula, M. Project Ensayo: Integrating simulation, training, discovery and support. Presentation and Proceedings of the North American Association for Computational Social and Organizational Science (NAACSOS 2006), June 22-23 2006, Notre Dame, Indiana.
- 10. Becerra-Fernandez, I., Wang, T., Agha, G. Actor Model and Knowledge Management Systems: Social Interaction as a Framework for Knowledge Integration. Keynote Presentation and Proceedings of the 3rd Conference Professional Knowledge Management Experiences and Visions, April 2005, Kaiserslautern, Germany.
- 11. Fiore, S. M., Jentsch, F., Becerra-Fernandez, I., Salas, E. & Finkelstein, N. Integrating field data with laboratory training research to improve the understanding of expert human-agent teamwork. (**Nominated for Best Paper Award**). Presentation and Proceedings of the 38<sup>th</sup> Hawaii International Conference System Sciences, January 2005, Big Island, Hawaii.
- 12. Becerra-Fernandez, I., Gonzalez, A. and Sabherwal, S. Knowledge Capture Systems in Knowledge Management. Presentation and Proceedings of the Second Latin American and Caribbean Conference for Engineering and Technology (LACCEI), June 2-4 2004, Miami, FL.
- 13. Florida Alliance for the Study of Expertise [1]. From the perceptual to the organizational: How can the science of expertise better inform the practice of human performance? In D. Vincenzi, M. Mouloua, and P. Hancock (Eds.) Presentation and Proceedings of the Second Human Performance, Situation Awareness and Automation Conference: Current Research and Trends, Volume II (pp. 83-91). Mahwah, NJ: Lawrence Erlbaum Associates. 2004. [1]FASE represents the collaborative efforts of a number of scientists affiliated with Florida Universities. In alphabetical order, they are Irma Becerra-Fernandez, Jeff Bradshaw, Neil Charness, William Clancey, David Eccles, Anders Ericsson, Paul Feltovich, Stephen Fiore, Peter Hancock, Laura Hassler, Robert Hoffman, Christopher Janelle, Tristan Johnson, Mike Prietula, Eduardo Salas, Jim Szalma, and Gershon Tenenbaum.
- 14. Negash, S., Becerra-Fernandez, I., and Rodgers, W. Taxonomy of Knowledge Creation Process by Organization Type: Are some types of organizations better equipped to convert tacit/explicit knowledge? Presentation and Proceedings of the Southern Association for Information Systems (SAIS) conference, February 2004, Savannah, GA.
- 15. Becerra-Fernandez, I., and Murphy, K. Semtor and iReality Group: The Merger of Two Professional Services Firms. Presentation and Proceedings of the Hawaii International Conference on Business (HICB), June 2003, Honolulu, Hawaii.
- 16. Elam, J., Murphy, K. and Becerra-Fernandez, I. Planning for SAP R/3 Implementation at IBM Personal Systems Group. Presentation and proceedings of the North America Case Research Association. October 2002. Banff. Canada.
- 17. Becerra-Fernandez, I. A Business Strategy Approach to Managing Experiences. Presentation and proceedings of the German Workshop for Experience Management: Sharing Experiences about the Sharing of Experience, March 2002, Berlin, Germany.
- 18. Becerra-Fernandez, I. Searching for Experts with Expertise-Locator Knowledge Management Systems. Presentation and Proceedings of the Association for Computational Linguistics Conference (ACL-2001) Workshop on Human Language Technology and Knowledge Management, July 2001, Toulouse, France.
- 19. Becerra-Fernandez, I., sMcCarthy, K., and sRodriguez, J. An Infrastructure for Managing Knowledge Using Intelligent Workflow. Presentation and Proceedings of the 14th International Artificial Intelligence Research Society Conference, May 2001, Key West, Florida.
- 20. Becerra-Fernandez, I. and <sup>s</sup> Rodriguez, J. Web Data Mining Techniques for Expertise-Locator Knowledge Management Systems. Presentation and Proceedings of the Fourteenth International Artificial Intelligence Research Society Conference, May 2001, Key West, Florida.
- 21. Becerra-Fernandez, I. Facilitating the Online Search of Experts at NASA using Expert Seeker People-Finder. Presentation and Proceedings of the Third International Conference on Practical Aspects of Knowledge Management, October 2000, Basel, Switzerland.
- 22. Becerra-Fernandez I., Stewart H., Del Alto M., and Knight C. Developing and Advanced Environment for Collaborative Computing. Presentation and Proceedings of the 13th

- International Florida Artificial Intelligence Research Society Conference (FLAIRS-2000), May 2000, Orlando, FL.
- 23. Weber, R., Aha, D., Branting, K., Lucas, R., Ashley, K., Becerra-Fernandez, I., Active Case-Based Reasoning for Lessons Delivery System. Presentation and Proceedings of the 13th International Florida Artificial Intelligence Research Society Conference, May 2000, Orlando, FL.
- 24. Weber, R, Aha, D. Branting, L., Lucas, J., and Becerra-Fernandez, I. Active Case-Based Reasoning for Lessons Delivery System. Presentation and Proceedings of the AAAI-2000 Workshop on Intelligent Lessons Learned, Austin, Texas.
- 25. Becerra-Fernandez, I., The Role of Artificial Intelligence Technologies in the Implementation of People-Finder Knowledge Management Systems. Presentation and Proceedings of the 2000 American Association for Artificial Intelligence (AAAI) Spring Workshop "Bringing Knowledge to Business Processes," March 1999, Menlo Park, California.
- 26. Elam J., Becerra-Fernandez, I., Murphy, K., and Simon, S., ERP as an Enabler of Curriculum Integration. Proceedings of the Third Annual SAP Asia Pacific SAPHIRE 99 "Institute of Higher Learning Forum," Singapore, October 1999.
- 27. Becerra-Fernandez, I., Taylor, A., Buckingham, G., Brown, D., Entessari, A., and Kinney, F. NASA/Florida minority institution entrepreneurial partnership results. Presentation and Proceedings of the 5th International Conference of the Decision Sciences Institute, July 1999, Athens, Greece.
- 28. Becerra-Fernandez I. Knowledge management today: Changing the corporate culture. Presentation and Proceedings of the 5th International Conference of the Decision Sciences Institute, July 1999, Athens, Greece.
- 29. Becerra-Fernandez, I. Findings from the Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. Presentation and Proceedings of the 1999 American Association for Artificial Intelligence (AAAI) Workshop "Exploring Synergies of Knowledge Management and Case-Based Reasoning", July 1999, Orlando, Florida
- 30. Becerra-Fernandez, I. "Searchable Answer Generating Environment (SAGE): A Knowledge Management System to search for experts in Florida. Presentation and Proceedings of the 12th Annual International Florida Artificial Intelligence Research symposium: Knowledge Management Track, May 1999, Orlando, Florida.
- 31. Becerra-Fernandez, I. and Aha, D. Case-Based Problem Solving for Knowledge Management Systems. Presentation and Proceedings of the 12th Annual International Florida Artificial Intelligence Research symposium: Knowledge Management Track, May 1999, Orlando, Florida.
- 32. Becerra-Fernandez, I., Taylor, A., Buckingham, G., and Kinney, F NASA/FMIEP Program's Impact on NASA, Minority Students and the Business Community. Presentation and Proceedings of the 36th Space Congress Conference. April 1999. Cape Canaveral, Florida.
- 33. S Hartmann H., Becerra-Fernandez, I., and Hudiburg H. Value Chain Analysis of the Ariane-4 Launch Campaign. Proceedings of the 36th Space Congress Conference. April 1999. Cape Canaveral, Florida.
- 34. Becerra-Fernandez, I., Taylor, A., Buckingham, G., Brown, D., Entessari, A., and Kinney, F. Benefits of the NASA/Florida Minority Institution Partnership Results. Presentation and Proceedings of the Making a Difference in the 21st Century: Technology Transfer Sessions of the Historically Black Colleges and Universities and Other Minority Institutions Annual Symposium, March 1999, Miami, FL.
- 35. Becerra-Fernandez, I., Taylor, A., Buckingham, G., Brown, D., Entessari, A., and Kinney, F. NASA/Florida Minority Institution Entrepreneurial Partnership. Presentation and Proceedings of the 35th Space Congress Conference. April, 1998. Cocoa Beach, FL.
- 36. Becerra-Fernandez, I., Lee, T., Hopkins, G. Reaching out to Engineering Management Students. Presentation and Proceedings of the 1998 ASEE Conference, Seattle, WA.
- 37. Becerra-Fernandez, I. sRiedel, J., Lee, T. Knowledge Management: Redefining Corporate Assets. Presentation and Proceedings of the 7th International Conference on Management of Technology Conference, February 1998, Orlando, FL.

- 38. Becerra-Fernandez, I., Lee, T., <sup>s</sup>Riedel, J. An evaluation of a Knowledge Management software. Proceedings of the 7th International Conference on Management of Technology Conference, February 1998, Orlando, FL.
- 39. Becerra-Fernandez, T. Lee, <sup>s</sup> Riedel, J. The Missing Link in Asynchronous Engineering Management Education. Presentation and Proceedings of the American Society for Engineering Management Conference, October 1997, Virginia Beach, Virginia.
- 40. Becerra-Fernandez, I., Campbell, R., Roig, G., and Hopkins, G. Mentoring Minority Engineering Students: A Program at Florida International University. Presentation and Proceedings of the 1997 American Society for Engineering Education Conference, June, 1997, Milwaukee, WI.
- 41. Becerra Fernandez, I. & Subbarao, W. A Private Architecture for Public Networks. Presentation and Proceedings of the IEEE Southcon '96, June, 1996, Orlando, Florida.
- 42. Tansel, Arkan, Bao, Show, Velez, Yih, Tosonoglu and Fernandez, Solving Industrial Problems in Mechatronics Class. Proceedings of Mechatronics '96, June, 1996, San Francisco, California.
- 43. Fernandez, I.B. & Subbarao, W. Privatizing Public Network Data Transfers through Encryption. Presentation and proceedings of the Fifth International Conference on Management of Technology, February 1996, Miami, Florida.
- 44. Krishnaiyer R. and Fernandez I.B. Enterprise Integration through a Virtual Manufacturing Enterprise Network. Proceedings of the Fifth International Conference on Management of Technology, February 1996, Miami, Florida.
- 45. Tansel, T. Arkan, W. Bao, J. Shaw, C. Velez, T. Yih, S. Tosonuglu, I. Fernandez and B. Tansel, Design and Realization of an Automated Log Strip Separator (LSS). Paper presented at the 1997 Florida Conference on Recent Advances in Robotics, April, 1997, Miami, Florida.
- 46. S Ledo, L., Ebadian, M., & Fernandez, I. Technology Transfer at the Hemispheric Center for Environmental Technology (HCET). Paper presented at the Environmental Technology Conference, November, 1996, Orlando, Florida.
- 47. Fernandez, I.B., Subbarao W. Encryption based Security for ISDN Communication: Technique and Application. Presentation and Proceedings of the IEEE Southeastcon '94, April, 1994, Miami, Florida.

#### **BOOK CHAPTERS:**

- 1. Becerra-Fernandez, I. and Leidner, D. On Knowledge, Knowledge Management, and Knowledge Management Systems: An Introduction. In *Knowledge Management: An Evolutionary View of the Field.* Irma Becerra-Fernandez and Dorothy Leidner [eds.] (Advances in Management Information Systems Series). Publisher M.E. Sharpe, Armonk, NY. 2008.
- 2. Becerra-Fernandez, I. and Sabherwal, R. Knowledge Management and Organizational Learning: Where technology and socialization meet. In *Knowledge Management: An Evolutionary View of the Field.* Irma Becerra-Fernandez and Dorothy Leidner [eds.] (Advances in Management Information Systems Series). Publisher M.E. Sharpe, Armonk, NY. 2008.
- 3. Becerra-Fernandez, I. Expertise Locator Systems. In *Knowledge Management Strategies: A Handbook of Applied Technologies*. Miltiadis Lytras, Meir Russ, Roland Maier, Halle Wittenberg [eds.], Publisher: Idea Group, New York, NY. 2008.
- 4. Becerra-Fernandez, and Sabherwal, R. The Role of Information and Communication Technologies. In Knowledge Management: A Classification of Knowledge Management Systems. In *Information Communication Technologies: Concepts, Methodologies, Tools, and Applications*. Craig Van Slyke [ed.], Publisher: Information Science Reference, Hershey, PA. March 2008.
- 5. Becerra-Fernandez, I., Del Alto, M., and Stewart, H. The Launch of Web-based Collaborative Decision Support at NASA. In *E-Collaboration in Modern Organizations: Initiating and Managing Distributed Projects* (Advances in e-Collaboration Series: Volume 2). Ned Kock [ed.], Publisher: Idea Group, New York, NY. November, 2007.
- 6. Becerra-Fernandez, I. and Sabherwal, R. ICT and Knowledge Management Systems. In Knowledge Management: Concepts, Methodologies, Tools, and Application. Murray E. Jennex [ed.], Publisher: Information Science Reference, Hershey, PA. August, 2007

7. Becerra-Fernandez, I. and Sabherwal, R. The Role of Information and Communication Technologies in Knowledge Management: A Classification of Knowledge Management Systems. In *The Encyclopedia of Knowledge Management*. D. Schwartz [ed.], Publisher: Idea Group Reference. July, 2005.

## **CASE STUDIES:**

- Becerra-Fernandez, I., Del Alto, M. and Stewart, H. (2006). "A Case Study of Web-based Collaborative Decision Support at NASA." Published in *International Journal of e-Collaboration*," (IJEC), 2(3) 49-63.
- 2. Becerra-Fernandez, I., Murphy, K., and Elam, J. (2005). "Successfully Implementing ERP: The IBM Personal Systems Group Experience." Published in *International Journal of Internet and Enterprise Management*" (IJIEM), 3(1), 78-97.
- 3. Elam, J. and Becerra-Fernandez, I. (2003). "MetalSpectrum: A Virtual Marketplace for Brick-and-Mortar Products." Published in *Journal of Information Systems Education (JISE*), 14 (3), 285-292.
- 4. Becerra-Fernandez I. and Sabherwal R., (2005). "Knowledge Management at NASA-Kennedy Space Center." Published in *Internal Journal of Knowledge and Learning (IJKL)*. 1(1/2). 159-170
- 5. Becerra-Fernandez, I., and Murphy, K. (2001). Semtor and iReality Group: The Merger of Two Professional Services Firms. Published in the 2003 HICB Conference Proceedings, Hawaii.
- Samii, R. Van Wassenhove, L., Kumar, K. and Becerra-Fernandez, I. (2002). IFRC: Choreographer of Disaster Management – Preparing for Tomorrow's Disasters. Published by INSEAD, Fountainebleau, France. Selected as the basis for competition by student teams participating in the 9<sup>th</sup> Annual FedEx International Graduate Logistics Case Competition in Fayetteville, Arkansas.
- 7. Samii, R. Van Wassenhove, L., Kumar, K. and Becerra-Fernandez, I. (2002). IFRC: Choreographer of Disaster Management The Gujarat Earthquake. Published by INSEAD, Fountainebleau, France.

# **TECHNICAL REPORTS, GOVERNMENT REPORTS, AND OTHER REVIEWED PUBLICATIONS:**

- Becerra-Fernandez, I. (2005) "A Strategic Direction for Knowledge Management at NASA", Government Report presented to: the Associate Administrator for Institutions and Management, the Chief Engineer, the Chief Human Capital Officer, the Chief Information Officer, and the Chief of Safety and Mission Assurance. September 30, 2005.
- 2. Becerra-Fernandez, I. (2003) "Expert Seeker", NASA TechBriefs, 27(12), p.36-37.
- 3. Becerra-Fernandez, I. (2001) Locating Expertise at NASA Developing a tool to leverage human capital. *Knowledge Management Review*, 4(4), 34-37.
- 4. Becerra-Fernandez, I. (1999) "Small Business Innovation Research (SBIR) Expert System", NASA Kennedy Space Center Research & Technology 1999 Annual Report (NASA Technical Memorandum 208567), 130-132.
- 5. Becerra-Fernandez, I. (1999) "Management Support Systems: Expert Seeker a People-Finder Knowledge Management System to Seek Experts at Kennedy Space Center", NASA Kennedy Space Center Research & Technology 1999 Annual Report (NASA Technical Memorandum 208567), 132-133.
- 6. Becerra-Fernandez, I. (1999) "Management Support Systems: Searchable Answer Generating Environment (SAGE): a Knowledge Management System to Seek Experts in the State of Florida University System", NASA Kennedy Space Center Research & Technology 1999 Annual Report (NASA Technical Memorandum 208567), 134-136.
- 7. Aha, D., Becerra-Fernandez, I., Maurer, F., and Muñoz-Avila, H. (1999) [eds.] *Exploring Synergies of Knowledge Management and Case-Based Reasoning: Papers from the AAAI 1999 Workshop*, Technical Report, WS-99-10. Menlo Park, CA: AAAI Press.
- 8. Becerra-Fernandez, I., & Wunnava, S. 1999. "ISDN and Secure Time Switches". *Wiley Encyclopedia of Electrical and Electronics Engineering*. John Wiley & Sons, Inc., 721-734.

- 9. Becerra-Fernandez, I. (1998) "Management Support Systems: Methodology to Harvest Intellectual Property at Kennedy Space Center". *NASA Kennedy Space Center Research & Technology 1998 Annual Report* (NASA Technical Memorandum 208545), 82-83.
- 10. Becerra-Fernandez, I. (1998) "Management Support Systems: Program Corporate Memory: a Knowledge Repository for Kennedy Space Center". NASA Kennedy Space Center Research & Technology 1998 Annual Report (NASA Technical Memorandum 208545), 88-89.
- 11. Becerra-Fernandez, I. (1998) "General: Searchable Answer Generating Environment (SAGE) -A Knowledge Management System to seek experts in the Florida State University System". NASA Kennedy Space Center Research & Technology 1998 Annual Report (NASA Technical Memorandum 208545), 109-109.
- 12. Becerra-Fernandez (1998) "Center for Innovation and Knowledge Management". ACM SIGGROUP Bulletin, Special Issue on Knowledge Management "Knowledge Management at Work", April.
- 13. Becerra-Fernandez, I. (1997) "General: Methodology to Harvest Intellectual Property at KSC". NASA Kennedy Space Center Research & Technology 1997 Annual Report (NASA Technical Memorandum 207196), 30-31.

# **PRESENTATIONS**

## **KEYNOTE SPEECHES**

- 1. **Keynote speaker** at the 5<sup>th</sup> International Conference on Digital Information Management (ICDIM 2010), "Three Generations of Knowledge Management Systems and their Impact on Organizational Learning," July 2010, Thunder Bay, Canada.
- 2. **Keynote speaker** at the 10th European Conference on Knowledge Management, "KM and Organizational Learning: Where Technology and Socialization Meet," September 2009, Vicenza, Italy.
- 3. **Keynote speaker** at the 2009 PhD Project ISDSA Conference, "My Story: Unplugged," August 2009, San Francisco, CA.
- 4. **Keynote speaker** at the 3rd Conference Professional Knowledge Management Experiences and Visions, "Actor Model and Knowledge Management Systems: Social Interaction as a Framework for Knowledge Integration," April 2005, Kaiserslautern, Germany.

# NATIONAL/INTERNATIONAL CONFERENCES: (S DENOTES STUDENT CO-ATUHOR)

- 1. Co-organizer of the Doctoral Consortium for the 2015 Americas Conference on Management Information Systems, August 2015.
- 2. 2015 Council of Independent Colleges (CIC) Institute for Chief Academic and Chief Advancement Officers 'Staying the Course: Keeping the Campaign on Track when the Conductors are Changing' with Hilda Fernandez, November 2015.
- 3. 14th Annual Hispanic Association of Colleges and Universities (HACU) Latino Higher Education Leadership Institute: Career Development and Leadership Roundtable, October, 2015.
- 4. Invited speaker at the Global Intelligence Forum: Dungarvan Conference Panel Discussion: Knowledge Management in Higher Education, July 2015.
- 5. Becerra-Fernandez, Irma, Weidong Xia, <sup>s</sup> Jose Rocha, and <sup>s</sup> Arvind Gudi, "Task Uncertainty and Emergency Management Task Performance: The Mediating and Moderating Roles of Knowledge Sharing". Research paper published at the Conference Proceedings of the 2012 Americas Conference on Information Systems (AMCIS), Seattle, Washington August 9-11, 2012.
- 6. S Nikolai, C., Madey, G., Becerra-Fernandez, I., and M. Prietula (2010). Ensayo: A Distributed, Web-based Virtual Emergency Operations Center for Training and Research. The 7th International Community on Information Systems for Crisis Response and Management (ISCRAM) Conference PhD Colloquium and Poster Session, Seattle, WA.

- 7. Madey, G., Becerra-Fernandez, I., S Nikolai, C., and M. Prietula (2010). A Training and Research Simulator for Emergency Management. Institute for Operations Research and the Management Sciences (INFORMS), Austin, Texas.
- 8. S Nikolai, C., Madey, G., Becerra-Fernandez, I., and M. Prietula (2010). Ensayo: A Virtual Emergency Operations Center Simulator for Training and Research. Ph.D. Colloquium and Poster Session, Winter Simulation Conference, Baltimore, MD.
- Gregory R. Madey, Irma Becerra-Fernandez, Michael Prietula, and S Cynthia Nikolai, "Ensayo: A Virtual Emergency Operations Center for Training and Research", INFORMS, San Diego, October 2009.
- 10. Becerra-Fernandez, I. Xia, W., <sup>S</sup> Gudi, A., <sup>S</sup> Rocha, J. Task Characteristics, and Knowledge Sharing and Integration, and Emergency Management Performance: Research Agenda and Challenges. Invited presentation at the Stephenson Disaster Management Institute Conference Improving Disaster Supply Chain Management: Success and failure factors for humanitarian relief, Baton Rouge, Louisiana, December 2008.
- 11. Becerra-Fernandez, I. and Prietula, M. "Structured Emergence & Learning: EOCs, Extreme Events & Community Continuity", presentation at the Fourteenth Annual Organization Science Winter Conference, Olympic Valley, CA, February 2008.
- 12. Becerra-Fernandez, I. Prietula, M., Madey, G., Rodriguez, D., Sudi, A., and Rocha, J. "Project Ensayo: A Virtual Emergency Operations Center", presentation at the 16th International Conference on Management of Technology, May 2007, Miami Beach, Florida.
- 13. Sudi, I. and Becerra-Fernandez, I. "Effective knowledge management strategies in emergency response organizations", presentation at the IAMOT 2007-16th International Conference on Management of Technology "Management of Technology for the Service Economy", Miami Beach, Florida, USA, May 13-17, 2007.
- 14. S Rocha, J. and Becerra-Fernandez, I. "Effective Inter-organizational Knowledge Sharing in Public Disaster Management Response", presentation at the IAMOT 2007-16th International Conference on Management of Technology "Management of Technology for the Service Economy", Miami Beach, Florida, USA, May 13-17, 2007.
- 15. S Rocha, J. and Becerra-Fernandez, I. "Communities Of Practice, Leading The Way In Knowledge Sharing Processes In High-Tech Organizations", presentation at the IAMOT 2007-16th International Conference on Management of Technology "Management of Technology for the Service Economy", Miami Beach, Florida, USA, May 13-17, 2007.
- 16. Elam, J., Becerra-Fernandez, I., and Murphy, K. "Successfully Implementing ERP: The IBM Personal Systems Group Experience", presentation at Decision Sciences Institute 2002 Annual Meeting, November, 2002.
- 17. Elam, J., Becerra-Fernandez, I., and Murphy, K. "Planning for SAP R/3 implementation at IBM Personal Systems Group", presentation at the 2002 North American Case Research Association, October 2002, Alberta, Canada.
- 18. Becerra-Fernandez, I., Elam, J. "ERP Integration through Legacy Rejuvenation", presentation at INFORMS, November 2001, Miami Beach, Florida.
- 19. Becerra-Fernandez, I. "Interaction Technology for Managing Trust and Commitment in Collaborative Supply Chain Relationships", presentation at INFORMS, November 2001, Miami Beach, Florida.
- 20. Sabherwal, R. and Becerra-Fernandez, I. "The Effectiveness of Alternative Knowledge Integration Processes for Three Different Types of Specific Knowledge: Some Insights from NASA-Kennedy Space Center", presentation at "Managing Knowledge in Organizations: Creating, Retaining, and Transferring Knowledge", September 2001, Carnegie Mellon University, Pittsburgh, PA.
- 21. Becerra-Fernandez, I. and Knight C. "Team Seeker: Building Teams Intelligently Using Expert Seeker," June 2001, NASA Johnson Space Center, Houston, Texas.
- 22. Becerra-Fernandez, I. "Interaction Technology for Managing Trust and Commitment in Collaborative Supply Chain Relationships", presentation at the Delphi Collaborative Commerce Summit, June 2001, Coronado, California.

- 23. Becerra-Fernandez, I., Stewart, H., Knight, C., Del Alto, M. "Developing Distributed Collaboration Systems at NASA: A Report from the Field". Presentation and Proceedings of the Florida Workshop on Distributed Collaboration, April 2001, Hawk's Key Florida.
- 24. Becerra-Fernandez, I. and Kumar, K. "Technology, Trust, and Coordination: Three Lubricants of the B2B Digital Economy," presentation at the Delphi B2B Summit, November 2000, Amelia Island, Florida.
- 25. Becerra-Fernandez, I., "Knowledge Management Systems", presentation and Proceedings of the High Performance Computing and Communications Program/Computational Aero sciences (HPCC/CAS) 2000 Workshop, February 2000, NASA Ames Research Center, California.
- 26. Becerra-Fernandez, I. "This is Rocket Science: The Knowledge Repository of the Kennedy Space Center", presentation at the 1999 International Knowledge Management Summit. March 1999. San Diego, California.
- 27. Becerra-Fernandez, I., "Developing KSC's Expert Seeker: a People-Finder Knowledge Management System", 2nd Partners in Education and Research Conference, October 5-7, 1999, Cape Canaveral, Florida.
- 28. Becerra-Fernandez, I., "Searchable Answer Generating Environment", 2nd Partners in Education and Research Conference, October 5-7, 1999, Cape Canaveral, Florida.
- 29. Becerra-Fernandez, I., "Project Corporate Memory" Presentation at the Intelligent Systems session of the NASA Partners in Education Conference, October 7-9, 1998, Cocoa Beach Florida
- 30. Becerra-Fernandez, I. "Searchable Answer Generating Environment (SAGE) Application," Keynote presentation and proceedings of the 1st Annual Partners in Education & Research Conference. October 1998. Cocoa Beach, FL.

## **INVITED PRESENTATIONS:**

- 1. Invited Speaker to Washington State University: "KM and Organizational Learning: Where Technology and Socialization Meet", April 9th, 2010, Pullman, WA.
- 2. Invited Speaker to Massachusetts Institute of Technology Sloan Center for Information Systems Research "Task Characteristics, Knowledge Sharing and Integration, and Emergency Management Performance: Research Agenda and Challenges", February, 2009, Cambridge, MA.
- 3. Invited Speaker to Bentley University "Task Characteristics, Knowledge Sharing and Integration, and Emergency Management Performance: Research Agenda and Challenges", February, 2009, Waltham, MA.
- 4. Invited speaker to Queens University Monieson Centre: "Individual, Group, and Organizational Learning: a Knowledge Management Perspective", September 17, 2008, Kingston, Canada.
- 5. Invited by the Dean of the University of Puerto Rico to: 1. evaluate the curriculum reform for a BBA in information systems to comply with the ABET accreditation and students' needs; 2. evaluate the 2003-2008 Strategic Plan, in preparation for the AACSB accreditation; 3. evaluate the technology infrastructure that supports the delivery of technology services to students, professors, researchers, and college administrators; 4. doctoral seminar presentations: "Knowledge Management", and "Insights from the AACSB Re-accreditation". March 31 April 2, 2008, San Juan, Puerto Rico.
- 6. Invited speaker to the Computing Alliance of Hispanic-Serving Institutions 2nd Annual Meeting (CAHSI) "Young Faculty Success Strategies", December 16, 2007, Miami, Florida.
- 7. Invited speaker to Emory University Goizueta Business School: "Project ENSAYO A Virtual Emergency Operations Center (vEOC) for Disaster Management Research, Training and Discovery", November 6th, 2007, Atlanta, Georgia.
- 8. Invited speaker to Massachusetts Institute of Technology: "KM and Organizational Learning where Technology and Socialization Meet", June 6th 2007, Cambridge, Massachusetts.
- 9. Invited speaker to Louisiana State University "Project Ensayo: Integrating simulation, training, discovery, and support", February 2007, Baton Rouge, LA.
- 10. Invited speaker to the Universidad Iberoamericana (UNIBE), "Administracion en la Era Digital (Administration in the Digital Era)", September 2006, Santo Domingo, Dominican Republic.

- 11. Invited speaker to the Information Systems Doctoral Student Association (ISDSA) Ph.D. Project conference, "The Value of the Network", August 2006, Acapulco, Mexico.
- 12. Invited speaker to Jackson State University, Executive PhD Program in Urban Higher Education, "KM and Organizational Learning: Where Technology and Socialization Meet", November 2005, Jackson, MS.
- 13. Invited speaker to the University of Colorado at Denver, "Actor Model and Knowledge Management Systems: Social Interaction as a Framework for Knowledge Integration", March 2005, Denver, Colorado.
- 14. Invited speaker to the Hong Kong Polytechnic University, "Searching for Experts on the Web: A Review of Contemporary Expertise Locator Systems", October 2004, Hong Kong, China.
- 15. Invited speaker to the Knowledge Management Boot Camp "Knowledge Sharing via Expertise Locator Systems", George Washington University, September 2004, Washington DC.
- 16. Invited workshop presentation at the Information Systems Doctoral Student Association (ISDSA)
   Ph.D. Project conference, "Winning Grants: How to successfully obtain funded research",
   August 2004, New York, New York.
- 17. Invited speaker to the University of Illinois at Urbana-Champaign PhD Seminar Series, "The Role of Artificial Intelligence Technologies in the Development of Knowledge Management Systems", March 2004, Urbana-Champaign, Illinois.
- 18. Invited speaker to the Quality Education for Minorities (QEM) Third Annual Scholarly Technical Assistance Workshop, "Knowledge Management", September 2003, Atlanta, GA.
- 19. Invited panel speaker at the FIU New Faculty Orientation "What I wished I knew when I joined FIU", August 2003, Miami, Florida.
- 20. Invited workshop presentation at the Information Systems Doctoral Student Association (ISDSA)
   Ph.D. Project conference, "Winning Grants: how to successfully obtain funded research",
   August 2003, Tampa, Florida.
- 21. Invited speaker to the NASA Research Summit, "A Knowledge Management Primer", July 2003, Orlando, Florida.
- 22. Invited speaker to the Knowledge Management Roundtable on Expertise Management, sponsored by MITRE, "Expert Seeker and SAGE: Developing expertise locator systems @ NASA", February, 2003, Washington, DC.
- 23. Invited speaker to the University of South PhD Seminar Series, "Knowledge Management at NASA", February 2003, Tampa, Florida.
- 24. Invited panel speaker to the Information Systems Doctoral Student Association (ISDSA) Ph.D. Project (ISDSA) conference, "Achieving Excellence as an Underrepresented Minority in Academia", August 2002, Dallas, Texas.
- 25. Invited speaker to the University of British Columbia MIS Seminar Series, "A Business Strategy Approach to Managing Experiences", June 2002, Vancouver, Canada.
- 26. Invited speaker to the Cordis Corporation Information Management Strategic Planning meeting, "A Business Strategy Approach to Managing Experiences", June 2002, Miami, FL.
- 27. Invited keynote to the DOD Defense Technical Information Center Annual Conference-DTIC 2001 Annual Users Meeting and Training Conference, "Applications of Knowledge Exchange", April 2002, Washington, DC.
- 28. Invited speaker to the Johnson & Johnson Global Web Council Meeting, "The Interplay between Technology, Trust, and Coordination in the B2B Digital Economy", March 2002, Miami, FL.
- 29. Invited speaker to the NASA Ames Research Center Human-Centered Computing (HCC) Seminar Series, "Interaction Technology for Managing Trust and Commitment in Collaborative Supply Chain Relationships", November 2001, Moffet Field, California.
- 30. Invited keynote speaker to the Building the Agile Organization Executive Summit "Building the Agile Organization Through Business and IT Fusion", September 2001, Miami, FL.
- 31. Invited keynote to the Building the Real-Time Organization Executive Summit "E-Process Integration without Interference", July 2001, Miami, FL.
- 32. Invited speaker to the NASA Ames Research Center Human-Centered Computing (HCC) Seminar Series, "Knowledge Management Systems", March 2000, Moffet Field, California.

- 33. Invited speaker at the Martin Luther King Breakfast Panel, "Connectiveness, Creating Opportunities, Creating Possibilities", FIU, January 2000.
- 34. Invited speaker to the NASA Goddard Space Flight Center of Excellence in Space Data and Information Sciences (CESDIS) Seminar Series "Knowledge Management Systems", November 1999, Maryland.
- 35. Presentation and Panelist at the Breakfast General Session Panel "Industry and Education Programs", NASA Partners in Education Conference, October 1999, Cocoa Beach, Florida.
- 36. Invited speaker as special guest to the First Annual Women's History Month formal dinner organized by the Space Coast Section of the Society of Women Engineers (SWE), March 1999, Cocoa Beach, Florida.
- 37. Invited speaker to the American Society for Training and Development "Knowledge Management", November 1999.
- 38. Invited speaker to the NASA Kennedy Space Center Processing Model Forum, March 1999.
- 39. Invited speaker to the 1998-1999 Navy Center for Applied Research in Artificial Intelligence (NCARAI) External Seminar Series in Artificial Intelligence, "Program Corporate Memory: A Knowledge Repository for Kennedy Space Center", February 1999, Washington DC.
- 4o. Keynote presentation at the Lunch General Session, "State University System Capabilities: Searchable Answer Generating Environment", NASA Partners in Education Conference, October 7-9, 1998, Cocoa Beach Florida.
- 41. Invited keynote speaker presentation at the 5th Annual Industrial Engineering Symposium at CEII-Intec University, Title: "Capitalizacion del Conocimiento (Knowledge Management)", August 20-23, 1998, Santo Domingo, Dominican Republic.
- 42. Invited guest speaker to the University of Puerto Rico (UPR) Association of Industrialists and Faculty of the UPR, "Ventajas Tecnologicas en una Globalizacion Competitiva" (Technological Advantage in a Competitive Globalization), November 1996, UPR Regional College, Carolina, PR.
- 43. Presentation on Women in Engineering at the "ASPIRA Sixth Annual Young Latinas Conference: Mind, Body and Soul, Paradigm of the Holistic Women", to a group of 100 at-risk young minority females, Florida International University, March 27th, 1997, Miami, Florida.
- 44. Presentation on FIU Technology Licensing Opportunities to a group of industry technology licensing officials at the Southeast University/Lab/Industry Technology Transfer Conference, February, 1996, Orlando, Florida.
- 45. Seminar on "Emerging Information Technologies: Internet, Intranet, and Data Warehousing", Information Technology Conference '96: Applications for Effective Management, July 1996, Miami, Florida.
- 46. Seminar on "Telecommunication and Networking Technology", Information Technology Conference '95: Applications for Effective Management, December 1995, Miami, Florida.
- 47. Presentation on FIU Mentor Program, "Together we can make it work in Florida" Conference coconvened by the Quality Education for Minorities (QEM) Network and Florida International University, December 1995, Miami, Florida. Also presenter and panel moderator for the National QEM Conference, April 1996, Washington, D.C.
- 48. Presentations to professional groups: American Society of Heating and Refrigeration Engineers (ASHRAE), American Society of Mechanical Engineers (ASME), National Tooling Machining Association (NTMA), Illuminating Engineers Society (IES), Industrialists Association of Dade County (IADC), FIU-Industrial Engineering Forum 95 & 96.
- 49. Presentations to University students: Miami-PREP students (FIU, 98), NASA SHARP PLUS students (FIU, 95), US ARMY Gateway Program (FIU, 95), Society of Women Engineers, presentation at the annual high school students' breakfast, University of Miami: 1984, Florida International University: 1991, 1993.
- 50. Presentation to the CDC Users Meeting "Implementation of a Mainframe to PC Interface for accounting purposes", 1984.
- 51. Presentation to the IEEE Broward Chapter, "Florida Power and Light's System Control Center", 1983.

## **MAJOR WORKS IN PROGRESS**

- 1. Gudi, A., Becerra-Fernandez, I., and Xia, W. When Things Go Right in Disasters: The Moderating Effect of Specific Knowledge. Submitted to *MIS Quarterly*, under review.
- 2. Cousins, K., Becerra-Fernandez, I., and Varshney, U. "Wireless Healthcare Decision Support Systems: Supporting Health Services Continuity in the Face of Disasters".
- 3. Becerra-Fernandez, I., Vandermeer, D., Neederman, F. and Hernandez, M. The CIO Intrapreneur: Developing the Information Technology Leaders of the New Millennium, to be submitted to *Communications of the Association for Information Systems*.
- 4. SClemmons, S., Becerra-Fernandez, I. and Tremblay, M. C. Organizational Integration as a Means for Organizational Adaptability. Working manuscript, to be submitted to *Journal of MIS*.
- 5. Becerra-Fernandez, I. and Prietula, M. Structured Emergence & Learning: EOCs, Extreme Events & Community Continuity. Working manuscript, to be submitted to *Organization Science*.
- 6. Becerra-Fernandez, I., Xia, W., Gudi, A., Rocha, J. Task Characteristics, Knowledge Sharing and Integration, and Emergency Management Performance: Research Agenda and Challenges. Working manuscript, to be submitted to *Academy of Management Review*.
- 7. Rocha, J., Irma Becerra-Fernandez, Weidong Xia, and Steve Zanakis, The Moderating and Mediating Effects of Knowledge Sharing for Exploration and Exploitation. To be submitted to *Organization Science*.

# FUNDED RESEARCH GRANTS AND CONTRACTS

# **RESEARCH GRANTS**

(FINANCE THE DEVELOPMENT OF IDEAS AND RESEARCH, SUBJECT TO PEER REVIEW)

## **KAUFFMAN FOUNDATION**

- Title: Kauffman Campuses Initiative
- Amount: \$582,264
- P.I. Dr. Irma Becerra-Fernandez
- October 2010 through June 2011
- This is a seed grant in support of the Pino Global Entrepreneurship Center. The grant was matched by an endowment gift by Cisneros Foundation.

## NATIONAL SCIENCE FOUNDATION

- Title: Collaborative Research: II-NEW: Ensayo A Virtual Emergency Operations Center (vEOC)"
- Amount: \$107,976
- P.I. Dr. Irma Becerra-Fernandez (FIU); PI Dr. Greg Madey (Univ of Notre Dame \$139,713); P.I. Dr. Michael Prietula (Emory Univ 100,299)
- September 1, 2009 through August 31, 2012
- This project entails how to design, develop, deploy, and operate a virtual Emergency Operations Center (vEOC) for (1) primary use as a research instrument, but with (2) secondary use for training and education. The vEOC, named Ensayo, will enable research on dynamic decision-making, individual and group problem solving, organizational learning, communication, coordination, and knowledge management in the context of roles and organizational structures to enable cross-institutional management of disasters. The vEOC will be web-based implemented using open source and open standards software and tools. Little substantive research has been conducted on large scale, emergent management structures. The size and complexity of these emergent structures affords a unique insight into studying the mechanisms (both successful and less successful) of operation, providing a valid substrate to formulate the components of the vEOC. Our initial research has yielded insights into the role that a vEOC could play in this, and other EOC contexts

## **DIGICEL GROUP AND CLINTON FOUNDATION**

- Title: Digicel Entrepreneur of the Year Haiti 2010
- Amount: \$ 42.000
- P.I. Dr. Irma Becerra-Fernandez and Dr. Jose de la Torre
- April 15, 2010 through November 30, 2010
- Organize and deliver a three-day retreat for 24 CEOs and entrepreneurs from Haiti. The seminar is organized around a series of topics that are critical to the success of new entrepreneurial firms, particularly those in an unstable and uncertain environment such as prevails in Haiti at this moment. A combination of academic presentations by faculty with significant business expertise and discussion sessions run by seasoned entrepreneurs and venture capitalists will bring an ideal mixture of concepts and practical examples to the audience. One of the principal goals of the session included bringing important concepts in the fields of business strategy, environmental assessment, business-government partnerships, new venture financing and product development to the participants. A second and equally important goal is to expose the participants to the enormous wealth of experience that resides in current entrepreneurs and venture capitalists who deal on a daily basis with the challenges of new venture creation and development in South Florida

# SOUTH FLORIDA WORKFORCE INVESTMENT BOARD

- Title: Virtual Entrepreneurship Incubation Network (VEIN)
- Amount: \$129,012
- P.I. Dr. Irma Becerra-Fernandez
- March 1, 2009 through June 30, 2010
- The overarching purpose of the SFWIB Virtual Entrepreneurship Incubation Network (VEIN) is to promote both business start-ups and the expansion of small business through entrepreneurial training. VEIN will provide entrepreneurial training and virtual mentoring to 100-125 adult and dislocated workers. The intent of the partnership between FIU's Pino Global Entrepreneurship Center and the South Florida Workforce Investment Board (SFWIB) is to open the door to entrepreneurial opportunity and small business ownership to individuals, by developing their competencies in the many steps and activities associated with creating and sustaining and entrepreneurial venture.

# **KAUFFMAN FOUNDATION** (VIA FIU PINO CENTER FOR ENTREPRENEURSHIP)

- Title: Information Technology Entrepreneurship
- Amount: \$14,972
- P.I. Dr. Irma Becerra-Fernandez
- March 14, 2007 through March 15, 2008
- This grant proposes to incorporate the concepts of entrepreneurship and intrapreneurship into one graduate course: 'Management of the IS Function', a required course for students in the Masters of Science in Management Information Systems (MS MIS). In addition, it will develop a case study based on a successful entrepreneurial information technology firm headquartered in South Florida, which will be used as the basis for discussion in the new course.

# **NATIONAL SCIENCE FOUNDATION**

- Title: Enabling Globally-Distributed Electronic Collaboration (GloDEC) for Expertise Studies and Human and Social Dynamics Research Planning Grant
- Amount: \$49,979
- P.I. Dr. Irma Becerra-Fernandez; Co-P.I. Dr. Michael Prietula (Emory Univ)
- July 1, 2005 through June 30, 2007
- This is a planning grant to evaluate the feasibility and eventual expansion of the KM Lab to accommodate future research in expertise studies in two important areas: collaborative expertise and human and social dynamics. The overarching goals of this research is to design and develop

 a collaborative infrastructure that will allow FIU researchers to both expand each of these research streams and link them in innovative ways.

# **AIR FORCE RESEARCH LAB**

- Title: A Context Based Automated Knowledge Elicitation System
- Amount: \$124.849
- P.I.: Dr. Irma Becerra-Fernandez; Co-P.I.: Dr. Avelino Gonzalez (Univ of Central Florida)
- September 30, 2002 through December 31, 2003

This project proposes to investigate how to enhance the problem of subject matter expert knowledge acquisition. The efforts of this grant are directed at improving this process, which would result in a drastic decrease in manpower effort to implement the expert's tactical behaviors directly into a knowledge-based model. During this research, we will look at Context-based Reasoning as a potential solution, specifically through the implementation of the Context-based Intelligent Tactical Knowledge Acquisition (CITKA) system.

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION KENNEDY SPACE CENTER

- Faculty Awards for Research (FAR) Kennedy Space Center
- Title: Seeking Experts using a Searchable Answer Generating Environment (SAGE)-based Collaborative Computing Application
- Amount: \$300.000
- P.I.: Dr. Irma Becerra-Fernandez
- August 1999 through August 2002

This project proposes the development of a Center-wide application "Expert Seeker", a tool designed to catalog and allow intuitive access to expertise within the center. The main benefit of this application is that it will serve as a repository of intellectual capital within KSC by helping to identify KSC researchers for collaboration.

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION KENNEDY SPACE CENTER

- Title: "Enhancing the Scope and Functionality of SAGE".
- Amount: \$25.000
- P.I.: Dr. Irma Becerra-Fernandez
- August 15, 2001 through August 14, 2002

This project provides additional funding to enhance the Searchable Answer Generating Environment (SAGE) and integrate additional institutions in the state of Florida.

# NASA KENNEDY SPACE CENTER (VIA BETHUNE-COOKMAN COLLEGE)

- Title: NASA/Florida Minority Institution Entrepreneurial Partnership Grant
- Amount \$254.666
- P.I.: Dr. Irma Becerra-Fernandez
- August 1999 through August 2001.

In collaboration with Bethune-Cookman College (lead), Edward Waters College, Florida Memorial College, Miami-Dade Community College, Florida A & M, and the Technological Research and Development Authority. This project provides additional funding to enhance the Searchable Answer Generating Environment (SAGE), and to develop a web-based expert system to aid potential Small Business Innovation Research (SBIR) grant-seeking companies.

#### NASA AMES RESEARCH CENTER

- Title: Developing an Advanced Environment for Collaborative Computing by augmenting POSTDOC
- Amount \$200,000
- P.I.: Dr. Irma Becerra-Fernandez
- January 2000 through December 2001

POSTDOC is a "government-off-the-shelf" document management software developed at NASA-Ames Research Center (ARC). Currently, POSTDOC does not support a workflow tool. This project

proposes to augment the current POSTDOC environment with workflow capabilities.

# NASA GODDARD SPACE RESEARCH CENTER (VIA UNITED SPACE RESEARCH ADMINISTRATION)

- Title: Seeking Experts at Goddard Space Flight Center using Expert Seeker a People-Finder Knowledge Management System
- Amount \$ 69,222
- P.I.: Dr. Irma Becerra-Fernandez
- January 2000 through July 2000

This project proposes the development of the application "Expert Seeker" at Goddard Space Flight Center.

# NASA KENNEDY SPACE CENTER (VIA BETHUNE-COOKMAN COLLEGE)

- Title: NASA Florida Minority Institution Entrepreneurial Partnership
- Amount: \$360,000
- P.I.: Dr. Irma Becerra-Fernandez
- June 1997 through August 1999

In collaboration with Bethune-Cookman College (lead), Edward Waters College, Florida Memorial College, and the Technological Research and Development Authority. The program seeks to provide students and faculty exposure to high technology and technology transfer programs established by NASA and the Technological Research and Development Authority (TRDA). These programs include the commercialization of NASA technologies, assistance for companies seeking NASA Small Business Innovative Research Grants (SBIRs), the Florida/NASA Business Incubation Center and the Technology Outreach Program.

## NASA KENNEDY SPACE CENTER (VIA UNIVERSITY OF FLORIDA)

- Title: Program Corporate Memory Knowledge Repository for Kennedy Space Center
- Amount \$55.500
- P.I.: Dr. Irma Becerra-Fernandez
- December 1998 through August 1999

This project proposes the creation of a Knowledge Repository for KSC, the corporate memory or knowledge base of the organization. This project will define the methodology to allow capturing KSC's tacit knowledge.

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

- Title: Project VISION: Very Intensive Scientific Inter-curricular Onsite Education
- Amount \$800,000
- PI: Dr. Gustavo Roig. Co-PIs: Dr. Irma Becerra Fernandez and Dr. M. Ebadian

This project is a collaboration between KSC, Dade County Public Schools, the Public School System of Puerto Rico, FIU (lead) and Universidad del Turabo (UT) in Puerto Rico, whose goals are to increase participation of middle school students in, as well as their understanding of, science, mathematics, and technology. Project VISION plans to maximize the use of NASA developed educational information by adapting it to the middle school curriculum in a model that can be replicated at all public schools.

# RESEARCH CONTRACTS

(EMPHASIS ON PROVIDING PROFESSIONAL SERVICES)

## SRA INTERNATIONAL (ON BEHALF OF US AIR FORCE)

- Title: SRA CCT Mentor-Protégé Program
- Amount \$82,000
- P.I.: Dr. Irma Becerra-Fernandez
- October 2012– October 2014

Assist a small disadvantaged business (CCT, the protégés) to successfully compete for prime contract

and subcontract awards by partnering with a major defense contractor (SRA, mentor) under a project-based agreement to help meet the Air Force mission.

This project assisted the firm with their HR and financial practices.

## **UNION PLANTERS BANK**

- Title: Intelligent Flexible Manpower Scheduling System
- Amount \$42,000
- P.I.: Dr. Irma Becerra-Fernandez
- May July 2002

Develop a Web-based Intelligent Flexible Manpower Scheduling System to support the allocation of flexible manpower resources to bank activities, over a specific period of time, in multiple branches.

## LIONSTONE GROUP, INC.

- Title: Developing a Virtual Community for Kids
- Amount \$11,624
- P.I.: Dr. Irma Becerra-Fernandez
- March 2000 November 2000

This project created a web site aimed at helping parents teach their children about money management.

# **CAMBRIDGE TECHNOLOGY PARTNERS**

- Title: Center for Innovation and Knowledge Management
- Amount: \$9,999
- P.I.: Dr. Irma Becerra-Fernandez
- October 1997 January 1998

The charter of this center is to work with Cambridge Technology Partners to research and evaluate the practices, processes and technologies that are being used in the practice of Knowledge Management. Cambridge Technology Partners is a global professional services firm with 37 offices worldwide. The deliverable of this project is to identify enabling technologies that will provide a global collaborative work environment that can make "virtual teams" a reality.

## WORLDACCESS COMMUNICATIONS

- Title: Center for Innovation and Knowledge Management Applications in Telephony
- Amount \$6,000
- P.I.: Dr. Irma Becerra-Fernandez
- November 1997 February 1998

Compare source code against actual Telephony application, for verification and certification of authenticity of source code. Modifications to source code in a telephone switch to accept Internet strings for "callback" also drop and insert applications to remote nodes.

## Ph.D. STUDENT SUPPORT

(PRIVATE FUNDING IN SUPPORT OF PHD STUDENTS)

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, HEADQUARTERS

- Project Title: Development of an Integrated Knowledge Management Strategy
- Student: Arvind Gudi
- Dates: September 2004 September 2005

# PATENT DISCLOSURES, APPLICATIONS AND AWARDS

#### **PATENTS AND COPYRIGHTS:**

 GORB2006001 – Patent application serial number: 11/601,097 (with Leonard Boord and Chrysanthos Dellarocas), 2009.

- 2. Searchable Answer Generating Environment (SAGE) Expert Finder- Copyright number: TXU 967-122, 10/17/00, Florida International University.
- 3. Expert Seeker- Copyright number: TXU 1-098-745, 02/12/03, Florida International University.
- 4. Expert Seeker Web Miner- Copyright number: TXU 1-099-546, 02/10/03, Florida International University.

# PROFESSIONAL HONORS

#### **AWARDS AND RECOGNITIONS:**

- 1. **2016 UPS Community Service Award** by UPS Florida Latino Business Resource Group.
- 2. **2015 Educator of the Year** by the South Florida Hispanic Chamber of Commerce.
- 3. **2014 Bronze Medal Award** by the Miami Today Newspaper.
- 4. **2013 Educator of the Year** by HENAAC Great Minds in STEM<sup>™</sup> is an organization that promotes the STEM subjects (science, technology, engineering and mathematics) to underserved communities throughout the United States, with the goal to have those students pursue STEM-based careers. The HENAAC Awards recognize the achievements of the nations' top engineers and scientists within the Hispanic community.
- 5. **2012 In the Company of Women Award** for Education and Research, a Women's History Month Celebration with support from The Parks Foundation of Miami-Dade, the office of the Mayor and the Board of County Commissioners, March, 2012.
- 6. **2011 Association of Cuban Engineers Engineer of the Year Award**, For outstanding contributions to the profession.
- 7. **Best Paper Award,** First International Conference on Global Defense and Business Continuity (ICGDBC 2007), July 2007, San Jose, CA.
- 8. FIU Pino Center for Entrepreneurship, **2007 Kauffman Entrepreneurship Professor**, **March 2007**.
- 9. FIU College of Business Administration **Service Award**, October 2006.
- 10. Florida International University Excellence in Teaching Award, October 2006.
- 11. Knight Ridder Research Professorship, August 2006.
- 12. Selected among the faculty for initiation into the professional business fraternity Delta Sigma Pi, for academic achievements and continued interest in the profession, April 2006.
- 13. FIU College of Business Administration **Research Award**, October 2005.
- 14. Nominated for the Best Paper Award, 38th Hawaii International Conference System Sciences, January 2005, Big Island, Hawaii.
- 15. FIU College of Business Administration Research Award, October 2004.
- 16. Florida International University 2004 Torch Award for Outstanding Faculty presented by the FIU Alumni Association.
- 17. Inducted into the "Circle of Compadres", PhD Project Information Systems Doctoral Students Association, for supporting and openly embracing their role to promote and inspire African-American, Hispanic-American and Native-American Information Systems doctoral students as they pursue their degrees and take their place in the academic profession, August 2004.
- 18. FIU College of Business Administration Research Award, October 2003.
- 19. **Association of Cuban Engineers Amezaga Award**, for outstanding service to the organization, January 2003.
- 20. FIU College of Business Administration Research Award, October 2002.
- 21. Florida International University Excellence in Research Award, October 2001.
- 22. FIU College of Business Center for International Business and Executive Education (CIBER) travel award, 2001.

- 23. FIU College of Business CIBER Best International Paper Award, 2001.
- 24. FIU College of Business Administration Research Award, October 2000.
- 25. Society of Women Engineers Space Coast Section, "National Women's History Month Honoree", 1999.
- 26. Coalition of Hispanic American Women (CHAW) "Women's History Month Honoree in Science and Technology" 1997.
- 27. FIU award for **Outstanding Service** in the area of Access and Equity 1997.
- 28. Who's Who in America, Who's Who in Science and Engineering, Who's Who of American Women, and Who's Who in the World, Who's Who in Finance and Industry, Outstanding Young Woman of America.
- 29. Featured in National Science Foundation's sponsored "Engineering Inspirations" website at: http://sssl3.ece.drexel.edu/inspirations/fernandez/fernandez.html.

# OTHER PROFESSIONAL ACTIVITIES - DIRECT SERVICE

# TO THE UNIVERSITY COMMUNITY

#### **SERVICE TO THE UNIVERSITY**

- 1. Search and Screen: Director of School of Computing, 2010; Univ. CIO, 1997
- 2. Convocation Committee (2007 to present). Participate in the planning for the 2007 Convocation Ceremonies
- 3. Sabbatical committee (2008 to present). Participate in the selection of the sabbatical recipients for 2008-2009 academic year
- 4. Academic Judicial Committee (2008 to present). Participate in the academic misconduct and/or student grievance committees
- 5. Advisory Council and non-teaching Fellow, Honors College (2003-2007)
  - Undergraduate research committee
  - Advisor
  - Invited speaker for the Student Research and Artistic Initiative Seminar
- 6. Board of Directors for the FIU Alumni Association (1997 2005)
  - Chair, FIU Book Award Committee: A new initiative by the alumni to recognize scholarly excellence among high school juniors, who will receive a book authored by an FIU faculty or alumni. This ongoing initiative was launched for the first time in the Spring 2004, with 24 top high school junior students across Dade and Broward County recognized during its first year. This initiative has continued to grow and in the Spring 2006, 42 students were recognized with the FIU Book Award.
  - Chair, Alumni Board Nominating Committee
  - Represent the alumni in decision-making matters relevant to the university.
- 7. Faculty Senate Academic Policies Committee (2002-2004). Represent the College of Business on decision-making matters related to academic policies.
- 8. Advisory Board member, Center for Diversity in Engineering (2002- 2004). Serve as an advisor to the research center.
- 9. President's Advisory Committee on Women (2000-2003) Participate in a university-wide committee to improve the status of women at FIU.
- 10. Sponsored Research Representative (1999) Represented FIU's Division of Sponsored Research and Training at the Florida Space Research Institute meetings.
- 11. Alumni Address (Spring, 2004) Commencement, College of Engineering (and School of Architecture and College of Education)
- 12. Banner Marshal (Fall, 2003) Freshman convocation (representing Graduate Studies)
- 13. Banner Marshal (Spring, 1998) Commencement
- 14. Invited Speaker (August, 2003) FIU New Faculty Orientation "What I wished I knew when I joined FIU", Miami, Florida.

- 15. Invited Speaker (January 1999) Martin Luther King Annual Breakfast Panelist.
- 16. Author 9Fall 2004) Knowledge Management: Managing Cognitive Complexity with Intellectual Diversity, *Diversity Exchange Magazine*.

## **SERVICE TO THE COLLEGE OF BUSINESS**

- 1. Dean's Executive Relations Committee (2002-present)
  - Assist the Executive Dean to increase the membership of the Executive Dean's Council
  - Attend monthly meetings
  - Serve as liaison with members of the Executive Dean's Council
- 2. AACSB Re-accreditation visit (2007-2008) Participate in the activities associated with the re-accreditation visit.
- Elevate Miami (2008 to present) Led by Deanne Butchey and Dasaratha Rama, a social responsibility initiative to involve faculty and students in raising the digital literacy of the Miami community
- 4. CBA International Business Task Force (2008 to present) led by Mary Ann Von Glinow
- 5. CBA Faculty Lounge Committee (2008 to present) led by Jim Bussey
- 6. Strategic Planning Committee (2005-present) Led by Jim Bussey
- 7. Graduate Curriculum Committee (2003 present) Led by Shahid Hamid
- 8. Annual Goal Setting Conference (2007, 2008) Break-out Teamfacilitator
- 9. Faculty Development Committee (2009-2010; Led by Krishnan Dandapani; 2005-2007 Led by Robert Daigler)
- 10. MIS Assurance of Learning Committee (2005-present) Led by Tomislav Mandakovic
- 11. Learning Assurance Core Competency Task Force (2005-present) Led by Bill Welch
- 12. CIBER Advisory Board (2005-present) Led by Mary Ann von Glinow
- 13. College of Business Administration Scholarship Committee (1999-2003) DSIS department representative
- 14. Search and Screen Committee Member (1997 to present) For numerous positions from faculty to administrative, including among others:
  - Several tenure-earning and instructor positions in Information Systems
  - Several tenure-earning and instructor positions in Decision Sciences
  - Eminent scholar in Entrepreneurship
  - Ryder Eminent scholar
  - Marketing Eminent scholar
  - Entrepreneurship Faculty

## SERVICE TO THE DEPARTMENT OF DECISION SCIENCES AND INFORMATION SYSTEMS

- 1. Faculty Director for the Masters of Science in MIS (2003 2009)
  - Coordinated the MS MIS program review in April 2006
  - Coordinated the implementation of the MS MIS curriculum review, including the addition of a new course (Management of the IS Function),
  - Implemented with the faculty coordinator the Lunch and Learn seminar series, with the collaboration of the Advisory Board members, who serve as speakers in the series.
    - 1. Organizer and Panel Moderator for the MS MIS Lunch and Learn "Challenges Facing Today's CIOs", March, 2008.
    - 2. Organizer and Panel Moderator for the MS MIS Lunch and Learn "IT Entrepreneurship", March, 2007.
  - Implemented the addition of professional development seminars (PDS) to aid the development of student's managerial skills
  - Lead the graduate program in issues related to curriculum, students, and faculty
  - Formed an advisory board for the program, consisting of the leading Chief Information
     Officers and Directors of Information Technology for the leading companies in South Florida
  - Chair, Curriculum Review Committee

- Organizer "Microsoft Day" to present CBA faculty Microsoft's Academic Alliance, March,
   2008
- 2. MIS Ph.D. Program Coordinator (2007-2009)
  - Coordinate all aspects of the MIS PhD program including curriculum review, improving student recruitment, and student assessment
- 3. Organizer and Panel Moderator for the "Women in IT" panel at the "Women Who Lead" Conference, March, 2008.
- 5. Microsoft Academic Alliance (2007 to present) Serve as a liaison between the software company and the college. Organized Microsoft Day, for March 10, 2008
- 6. Host for faculty seminar and visitors (2002 to present) Invite leaders in Information Systems to give talks in our faculty seminar
- 7. SPSS Clementine Data Mining software relationship coordinator and point of contact (2002-2005) Serve as a liaison between the software company and the college.
- 8. United Way Ambassador (1999-2003) Help increase level of support to United Way within the department
- 9. Internship Coordinator (1998-2000) Design and implement procedure for Credit-earning Internships. Coordinate internships for DSIS students.
- 10. Committee Member (1998-1999) Re-design and implement the curriculum for the Masters of Science in Management Information Systems
- 11. Director and founder Knowledge Management Lab (<a href="http://www.kmlab.fiu.edu">http://www.kmlab.fiu.edu</a>) (1997).
  - The objective of the KM Lab is to research and evaluate the practices, processes, and technologies that are being used in the field of knowledge management. The need to acquire intellectual capital created the knowledge management movement, which aims to develop new practices and tools that discover, capture, share and apply organizational knowledge.
  - The National Aeronautics and Space Administration (NASA) has been the primary sponsor
    of the KM Lab, which has already received approximately \$1.8 Million in research funding.
     The KM Lab has also received support from the Air Force Research Lab and various private
    organizations such as: Cambridge Technology Partners, and Union Planters Bank.
  - Graduate and undergraduate students from different disciplines, including Computer Engineering, Computer Science, Electrical Engineering, English, Management Information Systems, Materials Engineering, Music, and Psychology, staff the KM Lab. Students graduated from FIU after completing research internships at the KM Lab and are now working at Fortune 100 organizations throughout the world. Many of them received assistantships to complete their graduate degrees.

# STUDENT Ph.D. DISSERTATIONS DIRECTED:

#### 1. Ph.D. Advisor

- Arvind Gudi (FIU, Management Information Systems, Spring 2008) Dissertation Title:
   Effective Knowledge Integration in Emergency Response Organizations
- Jose Rocha Mier (FIU, MIS, 2011) Dissertation Title: A Study on Uncertain Dynamic Disaster Management Tasks, Knowledge Sharing, and Task Performance

# 2. Ph.D. Committee Member

- Susan Clemmons (FIU, MIS, Fall 2005) Dissertation Title: The Impact of Information Technology on Organizations: A Study of Enterprise Resource Planning System Influences on Job Design and Organizational Culture
- Guillermo Garcia Tunon (FIU, College of Education, Fall 2008) Dissertation Title: Successful and Sustained Leadership: A Case Study of a Jesuit High School President
- Sheng Ying Tseng (FIU, MIS, 2009) Dissertation Title: Strategic Positioning of Taiwan in the Outsourcing Market: Evidence from IT Services and Electronic Manufacturing Outsourcing to China
- Carlos Albornoz (FIU, College of Education, Fall 2011) Dissertation Title: Exploring the Goals, Content and Methods of Entrepreneurship Professors: A Multiple Case Study

# STUDENT MASTERS THESIS DIRECTED:

## 1. Master's Thesis Advisor

- Jessica Riedel, Master's in Engineering Management, Business Plan for a Start-up Apparel Manufacturing Firm in Honduras, December 1999.
- Hector Hartmann, Master's in Engineering Management, A Case Study of the Ariane-4 Launch Campaign, May 1999.
- 2. Master's Thesis Committee
- Benigno Meneses, Master's in Engineering Management, *Design of a Scara Robot and Feasibility Study for the Corrugated Box Industry*, July 1998.
- Alvaro Quintana, Master's in Engineering Management, thesis: A Preliminary Economic Feasibility Study for Dual Production of Electric Power and Ethanol from Sweet Sorghum in Nicaragua, November 1997.

# OTHER PROFESSIONAL ACTIVITIES - INDIRECT SERVICE

# TO THE UNIVERSITY COMMUNITY

## **SERVICE TO THE PROFESSION**

- 1. **Elected** as the **Americas Region Representative** to the Association for Information Systems Executive Council. (April 2009 to Present)
- 2. Ph.D. Project Information Systems Doctoral Students Association (ISDSA) (2002 to present)
  - The Ph.D. Project ISDSA was created as a support and networking system for African Americans, Hispanic Americans and Native-Americans pursuing Doctoral Degrees in Information Systems at universities in the US.
  - Received "Circle of Compadres Award" for embracing the role to promote and inspire African-American, Hispanic-American and Native-American IS doctoral students as they pursue their degrees and take their place in the academic profession.
  - Invited keynote speaker and workshop presentation at the IS Ph.D. Project (ISDSA), August, 2009, San Francisco, CA.
  - Invited workshop presentation at the IS Ph.D. Project (ISDSA) alumni conference, "The Value of the Network," August 2006, Acapulco, Mexico.
  - Invited workshop presentation at the IS Ph.D. Project (ISDSA) alumni conference, "Winning Grants: How to successfully obtain funded research," August 2004, New York, NY.
  - Workshop presentation at the MIS Ph.D. Project conference, "Winning Grants: how to successfully obtain funded research", August 2003, Tampa, FL.
  - MIS Ph.D. Project conference, "Achieving Excellence as an Underrepresented Minority in Academia," August 2002, Dallas, Texas.
- 3. National Science Foundation
  - Workshop Participant Presentation and panel to define research agenda for the Science of Learning Center Workshop; "Multidisciplinary Approaches to Transfer Expertise and Innovation," (Travel funded by NSF), December 2006
  - National Science Foundation Panelist to review proposals for the CISE Directorate.
     (Travel funded by NSF), 2003 and 2007
- 4. Society for Information Management, South Florida Chapter, Program Co-Chair, (2007 to Present)
- 5. Association of Information Systems Membership Task Group, (2008 to Present)
- 6. Association of Cuban Engineers, (President 1995-97; Vice President 1993-95; Board of Directors 1998-2006)
  - Association of Cuban Engineers Amezaga Award, for outstanding service to the organization, January 2003.

- Provide financial assistance to Hispanic engineering students
- · Organize events of professional and cultural value
- Provide support to engineers recently arriving from Cuba

#### **EDITORIAL BOARDS**

- 1. International Journal of Knowledge and Learning, Inderscience Enterprise Ltd. (2004 to Present)
- 2. International Journal of Mobile Learning and Organisation, Inderscience Enterprise Ltd. (2005 to Present)
- 3. International Journal of Doctoral Studies, Informing Science Institute, (2007 to Present)
- 4. International Journal of Interdisciplinary Telecommunications and Networking, (2008 Present)
- 5. International Journal of Knowledge Management, (2008 to Present)
- 6. International Journal of Computers, (2008 to Present)

## **SERVICE TO PROFESSIONAL SOCIETIES**

- 1. Association of Information Systems Executive Committee, elected Representative for the Americas, May 2008 to Present.
- 2. Program Committee for Future Challenges in Expertise Retrieval (fCHER) SIGIR 2008 workshop, Singapore.
- 3. Program Committee for 7th International Conference on Practical Aspects of Knowledge Management 2008, Raiosha, Japan.
- 4. Session Chair for the 2008 International Community on Information Systems for Crisis Response and Management (ISCRAM) Session on Virtual Systems for Emergency Management Simulation and Training, Washington, DC.
- 5. Associate Editor, 2008 Decision Sciences Institute (DSI) Annual Conference, Baltimore, Maryland.
- 6. Associate Editor, International Conference on Information Systems (ICIS) 2008, Paris, France.
- 7. Program Committee 2005 IEEE Systems Man Cybernetics (SMC), Hawaii.
- 8. Track Chair 2005 International Conference of 2005 Information Systems (ICIS) on KM.
- 9. Track Chair for the 2004 Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. May, Miami Beach, Florida.
- 10. Track Chair for the 2002 7<sup>th</sup> Annual INFORMS Conference on Information Systems and Technology (CIST), Knowledge Management Track, November, San Jose, California.
- 11. Track Chair for the 2002 Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. May, Pensacola, Florida.
- 12. Track Chair for the 2001 Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. May, Key West, Florida.
- 13. Track Chair for the 2000 Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. May, Orlando, Florida.
- 14. Track Chair for the 1999 Florida Artificial Intelligence Research Symposium (FLAIRS) Knowledge Management Track. May, Orlando, Florida.
- 15. Track Co-Chair (with M. Mayburi) of the Association for Computational Linguistics Conference (ACL 2001) Workshop on Human Language Technology and Knowledge Management, July 2001, Toulouse France.
- 16. Track Co-Chair (with D. Aha, F. Maurer, and H. Muñoz-Avila) American Association for Artificial Intelligence (AAAI) Conference 2000 Workshop on Exploring Synergies of Knowledge Management and Case-Based Reasoning, August, Austin, Texas.
- 17. Program Committee 2002, 2001, 2000, 1999 Florida Artificial Intelligence Research Society (FLAIRS).
- 18. Program Committee 2006, 2202, and 2000 International Conference on Practical Aspects of Knowledge Management (PAKM).
- 19. Program Committee 2005, 2003 and 2002 German Workshop on Experience Management

- 20. Program Committee, 1998 Americas Conference on Information Systems (AMCIS)
- 21. Session Chair: 1998 INFORMS, "Knowledge, Knowing and the Organization," Seattle, WA

# **JOURNAL REVIEWER (AMONG OTHERS)**

- Management Science
- International Journal of Electronic Commerce.
- International Journal of Knowledge Learning Organisation
- Communications of the ACM
- Decision Sciences
- Decision Support Systems
- Journal of Management Information Systems
- MIS Quarterly
- Journal of Information Technology Cases and Applications
- Databases for Information Systems
- IEEE Transactions on Engineering Management
- International Journal of Electronic Commerce
- IBM Systems Journal
- Organization Science
- Knowledge Management Research & Practice
- International Journal of Human Computer Studies
- Journal Socio-Economic Planning Sciences
- Cambridge University Press

#### **SERVICE TO THE COMMUNITY**

- Oral examiner for the City of Hialeah (multiple times)
- Member of Florida's Coalition for Improving Mathematics and Science Education (CIMS) (1998-1999) and attended meetings in Ohio and Orlando and via conference calls.
   Responsible for instituting legislature for the Science FCAT. (Nominated by Mr. James Jennings, then Kennedy Space Center Deputy Director)

## **TELEVISION AND NEWSPAPER MEDIA INTERVIEWS**

- 1. Mega Noticiero, "Woman Empowerment," Mega TV, January 3, 2018.
- 2. Contigo en la Comunidad Miami ("Hispanic Women Empowerment"), Univision, December 30, 2017
- 3. The Miami Herald, "Senate Tax-Reform Bill Will Hurt Graduate Students and Charitable Giving to Universities," December 9, 2017
- 4. South Florida Business Journal, Education Special Section: "South Florida Universities Aid Puerto Rican Students in Aftermath of Hurricane." November 24, 2017
- 5. Business Wire, "St. Thomas University Offers Free Room and Board to College Students Affected by Hurricane," October 4, 2017
- 6. Miami Caribbean Code, "Regional Tech Summit Speakers Announced", June 25, 2017
- 7. The Florida Bar News, "Florida Bar Presidents Past and Present", May 1, 2016
- 8. Miami Today, "St. Thomas University Rolling Out 20 New Programs," March 11, 2015
- 9. FCA North America, "FIU Brings STEM Education to Miami-Dade County Public Schools with "Engineers on Wheels," September 9, 2014
- 10. Archdiocese of Miami, "New Provost named at St. Thomas U. Irma Becerra-Fernandez of FIU to take over for Gregory Chan," September 3, 2014
- 11. CISION, PR Newswire, "St. Thomas University Announces Appointment of New Provost," August 29, 2014
- 12. The Huffington Post, "Partnership Between Miami—Dade County Public Schools and FIU Sparks Educational Innovation and Improvement," March 13, 2013
- 13. Diverse Education, "Florida International Program Cultivating STEM Candidates Early," August 7, 2013

- 14. South Florida Business Journal, "People on the Move," May 17, 2013
- 15. FIU News, "Irma Becerra-Fernandez named Vice-President for Engagement," April 30,2013
- 16. Venture Equity Latin America, "VC Opportunities in Brazil, Colombia and Beyond," November 15th, 2011
- 17. CNN, "Oportunidades de Negocio," November 15, 2011
- 18. South Florida Business Journal, "Event connects entrepreneurs and investors," November 11, 2011
- 19. Business Wire, "FIU's Venture Capital Conference to Showcase Companies Destines to Create Jobs." November 8, 2011
- 20. Market Watch, "HackDay Miami: 40 Hackers, 24 Hours, \$10K in Prizes," November 8, 2011
- 21. Business Monday, "FIU to host Americas Venture Capital Event," November 7, 2011
- 22. Daily Business Review, "Capital Sources: Entrepreneurs seek boost at venture capital event," November 2, 2011
- 23. Expansion.com, "Empresas de toda America debatiran en Miami sobre el capital de riesgo", "October 19, 2011
- 24. FIU News, "FIU Americas Venture Capital Conference to showcase innovative ventures," October 4, 2011
- 25. CNN Espanol, "CNN en Espanol interviews Irma Becerra Fernandez," August 17, 2011
- 26. Reforma.com, "Grupo Reforma", August, 11, 2011
- 27. FIU BizNews, "FIU's Becerra-Fernandez shares expertise on Latin American venture development, promotes America Venture Capital Conference," August 11, 2011
- 28. Poder, "FIU's Americas Venture Capital Conference looking for innovators," August 4, 2011
- 29. Gamut News, "FIU's America Venture Capital Conference Draws Innovative Companies to Miami," May 24, 2011
- 30. Daily Business Review, "]"Capital Sources: Venture Capitalist Conference focuses on the Americas," November 10, 2010
- 31. iStockAnalyst, "Fueling innovation: FIU enterprise conference focuses on Latin America," November 8, 2010
- 32. Business Wire, "FIU's Pino Global Entrepreneurship Center to Host First Americas Venture Capital Conference," October 10, 2010
- 33. Miami Today, "Irma Becerra- Fernandez fosters entrepreneurship at FIU with first two day America Venture Capital Conference," October 6, 2010
- 34. Daily Business Review, "Venture Capital Opportunities Improve in South Florida," June 2, 2010
- 35. Miami Herald, "Jobless opt for entrepreneurship over job hunting" and "Venture Capital Opportunities Improve in South Florida," June 2, 2010
- 36. Openheimer Presenta, "Social Networking" (Latin American braodcast) February 4, 2008
- 37. Cosmoflorida Magazine, "Centro de Manejo del Conocimiento en FIU (Knowledge Management Lab at FIU)," March/April 2003
- 38. BizEd ShortTakes, On receiving Jose Amezaga Award from the Association of Cuban Engineers, May 2003
- 39. Telemundo (CBS): De Mañanitas, Interview on opportunities for returning to school and factors to ensure success, December 2002.
- 40. Telemundo (CBS): De Mañanitas, Interview on artificial intelligence and how it's used at NASA and the FIU Knowledge Management Lab, August 2002.
- 41. Knight Ridder Tribune Business News Washington, "Florida International University Teacher Manages, Maintains Database Systems," May 6, 2002.
- 42. Miami Herald, Business Monday "Networking in the Stratosphere: FIU professor links students to technology, NASA employees to experts," May 2002.
- 43. Internet Week, "A Real Risky Stage: Steelmaker Criticized for IT Upgrade Plans," January 2002.
- 44. South Florida Business Journal, "FIU Professor guides cutting-edge lab," February 2002.
- 45. FIU Newsletter, "College of Business Administration partners with SPSS," May 2001.
- 46. FIU Newsletter (FIU Profile), "Becerra-Fernandez brings order to chaos," October 2000.

- 47. Featured in the FIU Division of Sponsored Research and Training Annual Report, in recognition of significant student research efforts at the Knowledge Management Lab.
- 48. Becerra-Fernandez, I., "Segmento en Tecnología (Technology Segment)," CNN for Latin-America, May 1998
- 49. Becerra-Fernandez, I., "Temas de Mujer," Channel 17, February 1998
- 50. Becerra-Fernandez, I. "Gadgets and Gizmos," Dave Berry National Radio Program Interview, February 1998
- 51. Becerra-Fernandez, I. "América en Vivo (America Live)," Cable Channel Telemiami, March 28, 1997
- 52. Becerra-Fernandez, I., Report on Software Piracy, CNN Latin America, June, 1996
- 53. Becerra Fernandez, I., Arias J., Suarez E., "FIU In View Attracting Minorities to Sciences," January 18. 1996
- 54. Miami Herald, "Viewpoint: Hop on the technology wagon, or lose big bucks," June 12, 1998
- 55. Sun Sentinel, "Minorities moving up in sciences," September 1996
- 56. Miami Today, "Best of Dade's small manufacturers show range in products", June 1996
- 57. Vanidades Magazine: Featured in "Han Triunfado (Have Succeeded)" September 1995
- 58. Radio Caracol: Talk Show Speaker, "A Career in Engineering," June, 18,1995
- 59. Radio Caracol: Radio Talk Show Speaker, "Returning to School," August 13, 1995
- 60. Diario Las Américas, "Triunfos de Ingenieras Hispanas Graduadas de Florida International University (Successes of Hispanic Women Engineers Graduated from FIU)," June 1995
- 61. Exito, Sun Sentinel: "Una cubana para la historia de FIU (A Cuban woman for the history of FIU)," January 1995
- 62. Feature story FIU Engineering & Design News, Spring 1995, Miami, Florida.
- 63. Featured upon graduation by the Miami Herald, and Diario Las Américas, December 1994, Miami, Florida.