### WILFRIDO A. MORENO, Ph.D., PE

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#### **PROFESSIONAL PREPARATION**

University of South Florida, Tampa, FL Electrical Engineering, Bachelor of Science, 08/83 University of South Florida, Tampa, FL Electrical Engineering, Master of Science, 08/85 University of South Florida, Tampa, FL Electrical Engineering, Ph.D., 12/93

### APPOINTMENTS

08/08- Present Professor, Department of Electrical Engineering, University of South Florida.

10/00 – 7/08 Associate Professor, Department of Electrical Engineering, University of South Florida.

06/00 – Present **Director** for the Ibero American Science and Technology Educational Consortium at USF (USF-ISTEC).

08/94 – 09/00 Assistant Professor, Department of Electrical Engineering, University of South Florida

### CONSULTANT EXPERIENCE

06/14 – 08/14 Consultant, Leidos – Senior Systems Engineer

06/12 – 08/12 Consultant, SAIC – Systems Engineer

06/07 – 08/08 ISTEC VP of Strategic Planning while on Sabbatical

05/05 – 08/05 Consultant, Boeing – SAIC - Systems Engineer.

# PRODUCTS

#### Five products most closely related to the project:

- Luis Fernando Cruz Quiroga, Joel Howell, Wilfrido Alejandro Moreno, "Ethical Education in Engineering: A Pedagogical Proposal Based on Cognitive Neurosciences and Adaptative Complex Systems", 126<sup>th</sup> Annual ASEE Conference and Exposition, Tampa, Florida, June 15-19, 2019.
- Joel Howell, Christos Ferekides, Thomas Weller, Arash Takshi and Wilfrido Alejandro Moreno, "Preparing Engineering Students for their Profession - A Novel Curricular Approach", 126<sup>th</sup> Annual ASEE Conference and Exposition, Tampa, Florida, June 15-19, 2019.
- Prashanth Chetlur Adithya, Shraddha Pandey, Jose. A. Caballero, Ozgur Yurur and Wilfrido. A. Moreno, "Systems Engineering Framework to Design a Laboratory Course: A Case Study", ASEE Southeastern Section Conference, Daytona Beach, Florida, March 4-6, 2018.
- Luis Fernando Cruz Quiroga, Wilfrido Alejandro Moreno, Dulce Garcia, "A Model to Pedagogically Support Teaching & Learning Scenarios for Engineering Innovation from a Complexity Sciences Perspective", World Engineering Education Forum (WEEF 2013), September 24 – 17, 2013, Cartagena – Colombia
- Luis Fernando Cruz Quiroga, Wilfrido Alejandro Moreno, "Curriculum Development for Engineering Education, from a Complexity Perspective, to Meet the Challenges of the XXI Century", World Engineering Education Forum (WEEF 2012), October 15 – 18, 2012, Buenos Aires, Argentina

## Five other significant products:

- "Light-Weight Online Unsupervised Posture Detection by Smartphone Accelerometer", Özgür Yürür, Chi Harold Liu, Member, IEEE, and Wilfrido Moreno, IEEE Internet of Things Journal, VOL. 2, NO. 4, AUGUST 2015
- "Energy-Efficient and Context-Aware Smartphone Sensor Employment" Özgür Yürür, Chi Harold Liu, Charith Perera, Min Chen, Xue Liu, and Wilfrido Moreno, IEEE Transactions on Vehicular Technology, VOL. 64, NO. 9, SEPTEMBER 2015
- "Power Usage of Humanoid Standing Process Using Q-Learning", Ercan Elibol, Juan Calderon, Martin Llofriu, Carlos Quintero, Wilfrido Moreno, and Alfredo Weitzenfeld, Lectures Notes in Artificial Intelligence, Springer International – eBook, 2015
- "Fuzzy Variable Stiffness in Landing Phase for Jumping Robot", Juan M. Calderón, Wilfrido Moreno, Alfredo Weitzenfeld, Innovations in Bio-Inspired Computing and Applications – Book chapter, Volume 424 of the series Advances in Intelligent Systems and Computing pp 511-522, Date: 15 December 2015
- 5. United State Patent No. 6,258,633, Issued: July 10, 2001, titled: "Laser-Programmable Interconnect of Integrated Circuits Chips (ICS)".

## SYNERGISTIC ACTIVITIES

- 1. Committee Chairman, Florida Florida Learning Community (STEM disciplines) for the Consortium of Metropolitan Research Universities: FIU, UCF and USF
- 2. As the Director of the R&D ISTEC Initiative, Dr. Moreno created the Ibero-american Complex System and Education Network (SCED). The first area of application is in Education and is led by Dr. Luis Fernando Cruz from the Univeridad del Bosque, Bogota – Colombia. In addition, Dr. Moreno is the initiator of the Ibero-American Nanotechnology Centers Network (IBANCN) formed by over 10 Micro/Nano research centers throughout Latin America.
- 3. Conducted over thirty workshops in the areas of Digital Signal Processing, Controls, Electronic Design (FPGA/VHDL) and Systems Engineering in the following nations: Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru, Puerto Rico, United States and Venezuela
- 4. Developed and delivered a new graduate course on line in the Fall of 2013: EEL 6935 Agile System of Systems Engineering & Modeling (For Professionals)
- 5. Member of the International Council on Systems Engineering (INCOSE).

## **COLLABORATORS AND CO-EDITORS (6)**

- 1. Luis Fernando Cruz Quiroga, MD, Ph.D., Director of the Ibero-American Complex Systems & Education (SCED-ISTEC) Network & Universidad del Bosque, Bogotá Colombia
- 2. Fernando Falquez, Ph.D., Honeywell Aerospace, Senior Staff Engineer (RET) & USF Adjunct Faculty
- 3. Yashwant Pathak, M Pharm, EMBA, MS (Conflict Management), Ph.D., University of South Florida, College of Pharmacy/USF Health, Associate Dean for Faculty Affairs
- 4. Balaji Ramadoss, Ph.D., Founder and CEO, Edgility Cognitive Healthcare
- 5. Antonio Ruiz, Ph.D., Leidos (former SAIC), Chief Systems Engineer & Leidos Technical Fellow
- 6. Ozgur Yurur, Ph.D., RF Micro Devices Inc., Sr. Embedded Developer

# **GRADUATE ADVISOR (1)**

Samuel Garrett, University of South Florida (retired)

# THESIS AND DISSERTATION ADVISEES

Over sixty MS level students and twenty Ph.D. students have obtained their degrees under his direct supervision.