Alcides Ricardo Santander Mercado Ph.D.

Manager "Center of Excellence in Ports, Transport and Logistics"
Assistant Professor Department of Industrial Engineering
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Education

Undergraduate Studies

• B.S in Industrial Engineering: Universidad del Norte, Barranquilla.

Graduate Studies

- Specialization on Enterprise Logistics: Universidad del Norte, Barranquilla, 2003.
- Master of Science in Industrial Engineering: Universidad del Norte, Barranquilla, 2003.
- Master in International Commerce: Instituto de Estudios Bursátiles. Universidad Complutense, Madrid, España, 2007.
- Ph.D. in Industrial Engineering: University of South Florida, Tampa, EEUU. 2011.

Academic Experience

Undergraduate Level

- Universidad del Norte, 2001-2005, 2010-Present.
 - Work Analysis
 - Work Analysis Laboratory
 - Models and Production Systems
 - Transport and Distribution of goods
 - Industrial Safety Laboratory
 - Planning, Programming and Control of Production Systems
 - Design of Production Systems
 - Discrete Simulation
- University of South Florida, Spring 2009 Fall 2009 Catedrático.
 - Computer Simulation
 - Honors Seminar: Healthcare Systems Engineering.

Graduate Level

- Universidad del Norte, 2010-Present.
 - Modeling and Optimization of Transportation Systems.
 - Programming and Control of Production Systems.
 - Análysis and Capacity Planning.
 - Enterprise Logistics.
 - Advanced Topics in Production.
 - Optimization.

Research Experience

Publications

- "Multi-Criteria Decision Making in Outpatient Scheduling". Alcides Santander Mercado, José Zayas-Castro. Industrial Engineering Research Conference (IERC) Proceedings. Nashville, TN. May 2007
- "Evaluating the Impact of Walk-Ins and Patient Unpunctuality in the Performance of Appointment Scheduling Rules". Alcides Santander-Mercado, José Zayas-Castro, Laila Cure, Ali Yalcin. International Journal of Health Management and Information (IJHMI) ISSN: 2229-3108 Volume 2, Number 2, 2011, pp. 101–118.

International Conferences

- "Multi-Criteria Decision Making in Outpatient Scheduling". Alcides Santander-Mercado, José Zayas-Castro Ph.D. Industrial Engineering Research Conference (IERC). Nashville, TN. May 2007
- "Impact of Walk-in Patients and Non-Punctuality in an Outpatient Clinic Performance".
 Alcides Santander -Mercado, Jose Zayas-Castro Ph.D. Institute for Operations Research and Management Sciences (INFORMS) International Conference. San Juan, Puerto Rico. July 2007
- "Interpreting Laboratory Test Results as a Dynamic Model". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D.. Institute for Operations Research and Management Sciences (INFORMS) Conference. Seattle, WA. November 2007
- "Developing Comprehensive Patients' Profiles to Enhance Timely Disease Diagnostic". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D.. Industrial Engineering Research Conference IERC. Vancouver, Canada. May 2008.
- "Time Series Analysis of Laboratory Test Results to Prevent Adverse Patient Outcomes". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D.. Institute for

- Operations Research and Management Sciences (INFORMS) Conference. Washington, DC. October, 2008.
- "Time Series Clustering of Laboratory Test Results to Assess the Recovery Process of Heart Bypass Surgery". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D., Ramzi Sinokrot. Industrial Engineering Research Conference IERC. Miami, Fl. May 2008.
- "Identification of Patient Recovery Patterns after Cardiac Surgery Based on Laboratory Tests Results". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D., Philip Foulis M.D. M.P.H. Institute for Operations Research and Management Sciences (INFORMS) Conference. San Diego, CA. October, 2009.
- "Time-Series Analysis for Forecasting Patient Arrivals in Emergency Departments". Alcides Santander-Mercado, José Zayas-Castro Ph.D., Peter J. Fabri M.D. Ph.D. Industrial Engineering Research Conference IERC. Cancun, MX. June 2010.
- "A New Mixed Integer Linear Programming Mathematical Model for the Multi-Depot Vehicle Routing Problem with Multiple Objectives: Total Cost and Load Balance". Santiago Nieto Isaza, Alcides Santander-Mercado, Julián López Franco, Nilson Herazo. 26th European Conference on Operational Research. 2013.

Research Projects and Consultancy

- "Analysis of transportation requirements for Electricaribe S.A.based on simulation". 2010 -2011.
- "Design and implementation of management models for the improvement of the operational efficiency of Mundial Logistics Service S.A. (MLS) and Comercial Plastider S.A". 2011 2012.
- "Healthcare Engineering Alliance". Joint project with Arkansas University, Purdue University, NC State University y University of South Florida. 2008 2010.
- "Computer Based Training for TACLAN System" (2008/2010). United States Department of Defense. 2009 2010.
- "IGERT-SKINS. Sensory Knowledge-based Interface Science" (2005/2007). Internal Reviewer. National Science Foundation. 2005 2006.
- "Design and implementation of MRP systems for ACESCO S.A.". 2002.
- "Development of a comprehensive model for the design and management of resilient and robust supply chains". 2010 2012.
- "Impact evaluation of strategies related to students' dropouts and graduation in Universidad del Norte". 2012.
- "Systemic Innovations for sustainability and development in globalized markets for steel industries". 2013 2014.

- "Shipyard Modeling and development of scheduling models for ships repair and maintenance". 2014.
- "Development of a discrete simulation model for capacity analysis purposes for a drywall production system". 2013.
- "LogPort: Research and innovation program in logistics and ports in the Colombian Caribbean". 2014-2015.
- "Growth planning model for call center operations" Promitel S.A. (Lazus S.A). 2014.

Awards

• Excellence in the classroom. Universidad del Norte 2011-2012