Education

 Ph.D., Engineering Management and Systems Engineering Old Dominion University, Norfolk, VA GPA 3.98/4.0

August 2018

Dissertation: A Representation of Tactical and Strategic Precursors of Supply Network Resilience Using Simulation-Based Experiments Advisor: Mamadou Seck, Assistant Professor, Old Dominion University

Master of Sciences: Systems Engineering

2001 - 2002

National University of Colombia, Colombia GPA 4.1/5.0

Thesis: Valuation of an Investment Project in the Colombian Electricity Market using Real Options and Stochastic Control Theory

BS Engineering, National University of Colombia, Colombia 1995 - 2000
 Thesis: An Portfolio Theory-Based Approach to Risk Management in the Colombian Electricity
 Market

Teaching and Academic Experience

- Assistant Professor of Supply Chain Management/POM, Summer'16-Present Hasan School of Business, Colorado State University-Pueblo, Pueblo, CO Courses: Online Operations Management for MBAs; Operations Management; Operations Management for MBAs; Project Management; Advanced Statistics; Inferential Statistics; Graduate Level Biostatistics for the Nursing Department.
- Visiting Assistant Professor of Supply Chain Management/POM, Fall'15-Spring'16
 Hasan School of Business, Colorado State University-Pueblo, Pueblo, CO
 Courses: Project Management, obtained 4.4 and 4.1 in students' evaluations; Advanced Statistics,
 obtained 3.7 in students' evaluations; Inferential Statistics, ongoing.
- Adjunct, Engineering Department, Colorado State University-Pueblo, Pueblo, CO Spring 2015
 Course: Engineering Economy, obtained 4.0 in students' evaluation.
- Instructor, EMSE Department, Old Dominion University, Norfolk, VA
 Course: Engineering Economics, no students' evaluation available.
- Guest Scholar, ICPSR-ISR, University of Michigan, Ann Arbor, MI Summer 2005 I attended the Inter-University Consortium for Political and Social Research -ICPSR Summer Program in Quantitative Methods of Social Research. In one month period, an intensive, comprehensive, integrated program of studies in research design, statistics, data analysis, and research methodology applied to social sciences is covered. My research project for the program was oriented to the quantitative analysis of the impact that different learning attributes (e.g.

learning rates) can have on the dynamics of individuals' opinion in groups.

- Research Assistant, EMSE Department, Old Dominion University, Norfolk, VA 2002 to 2007
 Projects:
 - Scheduling Policies for the dynamic assembly flow shop scheduling problem considering earliness and tardiness; the proposal for this project came up as the result of a team project for an Optimization course I took, and the funds were awarded by the ODU's Research Foundation. Contract 99200. Amt.: \$11,000
 - o Systems of Systems Center of Excellence; in this project I was the co-lead research assistant for the modeling team who developed a simulation product for DHS. Funded by the Department of Homeland Security through NAVAIR, grant # 763641. Amt.:: \$848,736 A follow up for further extensions of the model and the methodology was granted through the MITRE Corporation funded by the Department of Homeland Security, grant # 247591. Amt.: \$228,580
 - A Systems of Systems Engineering (SoSE) Analysis of Integrated Port Security for the Virginia Port Authority, I collaborated with the team that developed a methodology to analyze the security challenges the Virginia Port Authority faces and to provide with guidelines for designing and implementing a Port Security System, using a SoSE approach.
- Instructor, Computer Sciences Department, University of Antioquia, Colombia Spring 2002
 Course: Industrial Simulation, no students' evaluation available.
- Instructor, Financial Engineering Department, University of Medellin, Colombia Spring 2002
 Courses: Theory of Finance, Project Valuation; no students' evaluation available.
- Research Assistant, Decision Sciences Dept., National Univ. of Colombia, Colombia 2001–2002
 Project: Investment Valuation in Electricity Markets using Real Options, Department of Decision Sciences
- Research Assistant, Center for Economic Research, Univ. of Antioquia, Colombia 1998 1999
 Project: Price Policies on Contingencies in Electricity Generation.

Intellectual and Scholarly Work

- Correa, Y., & Bedoya-Valencia, L. (2018). Analysis of dispatching rules for a dynamic flexible flow shop environment considering optimal batch size. Submitted to Flexible Services and Manufacturing Journal.
- Correa, Y., & Seck, M. (2018). An Operational Formulation of the Supply Network Resilience Concept using Simulation Based Experiments. To be submitted to *Journal of Applied Business* and Economics (JABE).
- Correa-Martinez, Y. & Bedoya-Valencia, L (2017, Sept). Designing Blended Content Modules
 as Support to Face-to-Face Delivery: An Application to Simulation Experiments and Inferential
 Statistics Courses. Presented at the ASEE Rocky Mountain Section Conference. Provo, UT.

- Correa, Y., & Seck, M. (2016). An Operational Formulation of the Supply Network Resilience Concept using Simulation Based Experiments. Abstract submitted to the 28th Production and Operations Management Society (POMS) Annual Conference. May 5-8, 2017 Seattle, WA
- Bedoya-Valencia, L. & Correa, Y. (2016, June). Designing Blended Content Modules as Support to Traditional Face-to-Face Delivery: An application to a Simulation Experiments Course. Accepted to be presented at the ASEE Annual Conference and Exposition. New Orleans, LA.
- Correa, Y., DeCuir, E. & Farmer, S. (2015, March). Toward an integrative approach to graduate student access and success. In *Higher Learning Commission Annual Conference: Collection of Papers*. Chicago, IL. Retrieved from http://cop.hlcommission.org/Student-Success/correa15.html
- Bedoya-Valencia, L., Palacio, K.S., Spencer-Workman, S. & Correa, Y. (2014, June). An Exploratory Study on the Contextual Challenges and Barriers of Introducing Sustainability to First Year Engineering Students. In *Proceedings of the 121st ASEE Annual Conference and Exposition*. Indianapolis, IN
- Bedoya-Valencia, L. & Correa, Y. (2014, May-June). An Agent-Based Model for Emergency Evacuation. In Proceedings of the ISERC Annual Conference and Exposition. Montreal, Canada
- Correa, Y., Farrer, R., and Watkins, T. (2014, April). PROPEL: The Value Proposition of a Comprehensive Portfolio of Services Supporting Student Success. In Higher Learning Commission Annual Conference: Collection of Papers. Chicago, IL. Retrieved from http://http://cop.hlcommission.org/Learning-Environments/correa.html
- Correa, Y., (2012, March) Southern Colorado STEM Community of Practice Pilot Project: Engaging Families to Increase STEM Awareness and Promote Community Interest in the STEM Fields. In Proceedings of the American Society for Engineering Education (ASEE) Rocky Mountain Section Annual Conference. Ogden, Utah. <u>Awarded Best Presentation</u>

Research Projects

- 2018-2019 ICR Grant: Application of Industrial Hemp, Co P.I.
 Sponsor: Colorado State University-Pueblo Institute of Cannabis Research Amount: \$215,000
- 2018-2019 SEED Grant: An Exploratory Assessment of the sustainability of the Hemp Supply Chain in the State of Colorado, P.I.

Sponsor: Colorado State University-Pueblo - Office of Research and Sponsored Programs Amount: \$7,160

 2018 SURP Grant: The role of product structure (BoM) on the resilience of complex supply networks

Sponsor: Colorado State University-Pueblo - Office of Research and Sponsored Programs Amount: \$1,440, P.I.

Institutional Service

Faculty Senate, HSB Senator

University Budget Board, Member

Academic Policies and Standards Board

Served in several hiring committees

Fall 2017-Present

August 2016-Present

August 2018-Present

Professional Memberships

- Member of the Institute for Operations Research and the Management Sciences –INFORMS
- Member of Production and Operations Management Society (POMS)

Other Professional Experience

- Instructional Designer, RAGE, Colorado State University-Pueblo May 2014 to date
 - Provide support and assist faculty in the design and deployment of the web-assisted or hybrid versions of their courses.
 - Develop training workshops on the pedagogical aspects of using instructional technologies in the classroom, with special emphasis in the use of Blackboard's features.
 - Manage the Faculty Development Stipends to support growth in the use of alternative delivery formats at CSU-Pueblo.
 - Provide support and assist in other grant related activities.
- Curriculum Development Specialist, PROPEL, Colorado State University-Pueblo 2012-2014
 - Design, planning, execution and coordination of the PROPEL Center at Colorado State University-Pueblo. Center services include, among others: personalized, walk-in and online tutoring; online self-assessments; supplemental instruction and teaching support.
 - Design and actualization of the Center's service portfolio based on students and Faculty needs.
 - o Assist the Development and Implementation of the Sustainability Minor.
 - Planning and operation of the PROPEL Summer Institute for Faculty and the management of the Service Learning Research Seed Stipends for Faculty.
- Project Coordinator, STEM Education Program, CSU-P Dec 2009 to Dec 2011
 - Analysis and design of evaluation instruments (pre and post treatment) to measure student's and family's perceptions of Science, Technology, Engineering and Mathematics (STEM) career fields
 - o Design of informational material about STEM and its careers, targeting a diverse population
 - o Design and deployment of STEM related lesson plans, guided talks and hands-on activities
 - Writing of grant proposals. Co-wrote the Southern Colorado STEM Community of Practice Pilot Project, Amt.: \$125.000.
 - o Participated in the team that wrote a proposal for the Department of Education Hispanic Serving Institutions STEM program, recently awarded to CSU-P. Amt.: \$4.35 million.
- Modeling and Simulation Associate, Health Market Science, King of Prussia, PA. 2007-2008

- Enhancement and management of agent-based models for simulation and optimization of physicians' personal promotion for tactical planning.
- Design and development of several system dynamics simulation models to support strategic brand planning.
- o Design and development of a modeling and simulation approach that integrates both agent based and system dynamics methodologies using a modular architecture.
- Junior-Senior Analyst, ALTEC, High Technology Consultants, Colombia 1996 1998
 - o Audit and controllership of RedP, an initiative to design and implement the first governmental network to promote citizens participation in public issues.
 - o Design and deployment of the evaluation indicators for the technical proposals (network acquisition, design and construction)