DANIEL B. L. SILVA

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EDUCATION

Clemson University, Clemson, SC — May 2025 (Expected)
Ph.D. in Industrial Engineering — GPA: 3.76
Advisor: Dr. Thomas Sharkey and Dr. Yongjia Song
Thesis: Efficiently Disrupting Human Trafficking Networks
Vice-president of the INFORMS Student Chapter 2022-2023

University of Arkansas, Fayetteville, AR — July 2021
M.S. in Industrial Engineering — GPA: 3.75
Advisor: Dr. Kelly Sullivan
Thesis: Efficiently Estimating Survival Signature and Two-Terminal Reliability for Heterogeneous Networks through Multi-objective Optimization
Secretary of the INFORMS Student Chapter 2020-2021 (Cum Laude Award 2021)
P.K. Kuroda and W.R. Thomas Endowed Fellow

Federal University of Pernambuco, Recife, Brazil — March 2019
M.S. in Industrial Engineering — GPA: 3.9
Advisor: Dr. Sóstenes Lins
Thesis: Maximum weight closure problem: mathematical aspects, algorithms, and applications

Federal University of Alagoas, Delmiro Gouveia, Brazil — December 2016
B.S. in Industrial Engineering — GPA: 8.83/10
Advisor: Dr. Glessia Silva
Senior Design Thesis: Supply chain management and performance

University of Arkansas, Fayetteville, AR — May 2015 - July 2015
BSMP Research Experience for Undergraduates
Advisor: Dr. Ed Pohl
Research: Disruptive technologies' impact on the healthcare supply chain logistic

Morgan State University, Baltimore, MD — August 2014 - May 2015
Industrial and Systems Engineering, non-degree international student — GPA: 3.50
Brazilian scientific mobility program fully funded scholarship recipient
Advisor: Dr. Massud Salimian

EXPERIENCE

Clemson University — August 2021 - Present
Graduate assistant — *Clemson, SC*

- Research Assistant (Dr. Thomas Sharkey and Dr. Yongjia Song) — Fall 2022 - Present
- IE-8590 Capstone Design Project. Instructor: Dr. Ozgur Kabadurmus — Summer 2022
- IE-3860 Production Planning & Control. Instructor: Dr. Thomas Sharkey — Spring 2022
- IE-4460/6460 Mod & Analysis of Manuf. Systems. Instructor: Dr. Bill Ferrell — Fall 2021

University of Arkansas — August 2019 - July 2021
Research assistant — *Fayetteville, AR*

· I worked with Dr. Kelly Sullivan on Wireless Sensors Network (WSNs) optimization and maintainability and in more general terms with heterogeneous network reliability estimation. We developed a method/algorithm to estimate the survival signature and two-terminal reliability of systems with two classes of components.

Federal University of Pernambuco March 2017 - March 2019
Research/teaching assistant *Recife, Brazil*

· Research: mathematical aspects, algorithms and applications of the maximum weight closure problem.
· Teaching: Graph theory, undergraduate level course for Computer Science and Computer Engineering students (instructor assigned grade: 10/10).

FEMAC Construction Supplier October 2016 - March 2017
Operations Manager *Brazil*

· As the operations manager, I coordinated the opening of a new distribution center in Arapiraca, Alagoas, Brazil.

Federal University of Alagoas December 2010 - January 2014
Tutorial Education Program *Brazil*

· Research: Simulation applied to transportation; Cleaner Production in Textile Manufacturing; Urban and Environmental Planning.
· Teaching: Mathematics for Engineering.
· Engineering & Technology Fairs and Expositions.

AWARDS & HONORS

- IE Student Research Travel Award - ($500) 2022
- P.K. Kuroda and W.R. Thomas Endowed Fellowship 2019-2021
- Brazil Scientific Mobility Program scholarship 2014-2015
- Academic Achievement IES, Morgan State University 2014
- Trained Six Sigma Green Belt, ISE Morgan State University 2014
- Honorable mention, 1st Brazilian Mathematics Olympics of Public Schools 2005

PROFESSIONAL AFFILIATION

- INFORMS 2019 - Present
- IISE 2019 - Present

TECHNICAL SKILLS

- **Programming:** C++, Python, Gurobi, R, Mathematica, MatLab, Latex.
- **Software:** ReliaSoft Weibull++, BlockSim.
- **Languages:** Portuguese (native), English (fluent), Spanish (basic).

RELEVANT COURSEWORK

Network Optimization	Linear Programming	Reliability/Maintenance
Combinatorial Optimization	Bi-level Optimization	Stochastic Processes
Interdiction Problems	Integer Programming	Six Sigma Green Belt

PUBLICATIONS

- **Lopes da Silva, D. B.** and G. Silva. Supply Chain Management and Performance: proposition of a conceptual model. *Exacta EP*, 2020. (doi.org/10.5585/ExactaEP.v18n3.8612).
- Santos, A. C. J., **D. B. Lopes da Silva**, B. R. Barros, J. A. Amorim. Contributions of cleaner production to a textile industry, in: XXXIII National Meeting of Industrial Engineering (ENEGEP). Bento Gonçalves-RS, Brazil, 2012.
- Santos, K. P., **D. B. Lopes da Silva**, B. R. Barros, J. A. Amorim. Engineering and Technology Fair: an approach to motivate young students in engineering, in: XL Brazilian Congress of Engineering Education (COBENGE). Belém-PA, Brazil, 2012.
- **Lopes da Silva, D. B.**, B. R. Barros, J. A. Amorim. Urban trees in the semi-arid region of Alagoas, in: IV Latin-American Meeting of Sustainable Edifications and Communities (ELECS). Vitória-ES, Brazil, 2011.

PRESENTATIONS

- **Lopes da Silva, D. B.**, Sharkey, T., Song, Y. A Bilevel Network Interdiction Problem with Applications in Human-Trafficking Disruption. 2022 INFORMS Annual Meeting, Indianapolis, IN, October 16-19.
- **Lopes da Silva, D. B.**, Sullivan, K. M. Efficiently Estimating Survival Signature of Heterogeneous Two-Terminal Networks through Multi-Objective Optimization. 2022 INFORMS Conference on Security (IConS), Arlington, VA, August 29-30.
- **Lopes da Silva, D. B.** Ensino, Pesquisa e Mobilidade Acadêmica: experiências de um doutorando em Engenharia de Produção no Exterior. Seminar for IE students from Federal Unviersity of Sao Francisco Valley, PE, Brazil, 2020.
- **Lopes da Silva, D. B.** Perspectivas Acadêmicas e Profissionais de um Egresso do Instituto Federal. Seminar for students from Federal Institute of Education, Science, and technology, AL, Brazil 2020.