BERNARDO DAVID PUENTE MEJIA

Quito - Ecuador

☎ (+593)995255311 ✉ bpuentem@usfq.edu.ec | bpuentem@mit.edu

🔗 LinkedIn 🌐 https://b-puentem.github.io ⦿ GitHub

EDUCATION

Massachusetts Institute of Technology MIT on edX[1]   *September 2020 - 2021*
MicroMasters in Statistics and Data Science
In progress. Current average grade 88%.

Massachusetts Institute of Technology MIT. Cambridge, MA   *May 2019 - April 2020*
MIT-SCALE Graduate Certificate in Logistics and Supply Chain Management (GCLOG).
Final average grade 92%.

Massachusetts Institute of Technology on edX   *September 2018 - September 2019*
MicroMasters in Supply Chain Management
Final average grade 92%.

Universidad San Francisco de Quito. Quito, Ecuador   *May 2013 - June 2018*
Industrial Engineering. GPA 3.32/4.00

RESEARCH AND WORK EXPERIENCE

Institute of Innovation in Logistics and Supply Chain Management CATENA. Quito, Ecuador
Research Staff (full time)   *September 2018 - Present*

· Lead and support research projects of the institute related to topics such as: Logistics and Supply Chain, Urban Systems Transportation and Mobility, Urban Logistics, Processes and Productivity, Humanitarian Logistics, Data Analysis, Big Data, Machine Learning.
· Consultant in Logistics, Supply Chain Management and Data Management projects.

Independent consultant - Data Management. Quito, Ecuador   *2020 - Present*

· Independent consultant on data management. Professional applications developed on VBA-Excel for companies of different industries.

COGNITIVA. Quito, Ecuador   *June 2017 - March 2018*
Industrial Consultant

· Industrial systems modeling and simulation for operation improvement and optimization.

Sassola Partners. Madrid, Spain   *July 2017 - September 2017*
Data and Process Analyst - Intern

· Database design and management. Investment funds analysis and tracking.

TEACHING EXPERIENCE

Universidad San Francisco de Quito USFQ. Quito, Ecuador
Instructor   *September 2018 - Present*

· Graduate Courses: Operations Research and Optimization Lab, Supply Chain Design Lab, Supply Chain Fundamentals Lab, Supply Chain Dynamics Lab.

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[1]All updated degree grades and transcripts can be found in my personal website.

· Undergraduate Courses: Probability and Statistics Lab, Discrete Events Simulation Lab, Data Management Lab, Biostatistics Lab, Quality Management Lab, Introduction to Industrial Engineering.

Massachusetts Institute of Technology MIT on edX
MITx Community TA   *August 2019 - May 2020*

· Community TA for two runs of MITx.CTL.SC3x Supply Chain Dynamics.

Universidad San Francisco de Quito USFQ. Quito, Ecuador
Teaching Assistant   *September 2017 - September 2018*

· Undergraduate Courses: Logistics, Simulation, Data Management.

RESEARCH AND PUBLICATIONS

Data-Driven Solutions for Evaluating and Planning Last Mile Operations in Latin America. A Methodological Approach Focused in Quito.
Puente-Mejia, B., Orellana-Rojas, C. and Suarez-Nunez, C. (2020); Yoshizaki, H.T.Y., Mejia Argueta, C. and Mattos, M.G. (Ed.) Supply Chain Management and Logistics in Emerging Markets, Emerald Publishing Limited, pp. 107-129. https://doi.org/10.1108/978-1-83909-331-920201006.

Freight Trip Generation Modeling and Data Collection Processes in Latin American Cities. Modeling Framework for Quito and Generalization Issues.
Puente-Mejia, B. Palacios-Arguello, L. Gonzalez-Feliu, J. Suarez-Nunez, C. (2020), Transportation Research Part A: Policy and Practice, Volume 132, Pages 226-241, DOI:10.1016/j.tra.2019.10.013

Optimization of Distribution of Humanitarian Aid: Cotopaxi Volcano.
Research paper - Secondary author. Paper accepted for publication.

Machine learning applied to last-mile operations: Models development for stop analysis in urban freight transportation.
Research paper - Secondary author. Paper under review.

Logistics cost assessment of the coffee value chain. A Peruvian Case Study.
Research paper - Secondary author. Paper under review. Collaboration with Universidad del Pacifico, Peru.

A comparison of conventional and virtual reality rest breaks in office workers.
Research paper - Secondary author. Paper under review.

Traffic and Congestion Effects of Urban Last-Mile Deliveries. Measuring Impact and Assessing Policy Measures.
Research paper - Main Author. Working paper. Collaboration with MIT-CTL, USA.

Adaptive convolutional neural network for medical image segmentation: Prostate cancer semantic segmentation of MRI images.
Research paper - Secondary Author. Working paper. Collaboration with Moffitt center, USA.

CONFERENCES AND SEMINARS

Production and Operations Management Society (POMS) Conference. Lima, Peru
Two papers accepted to present at conference: *December 2021*

· Machine learning applied to last-mile operations: Models development for stop analysis in urban freight transportation.
· Logistics cost assessment of the coffee value chain. A Peruvian Case Study.

Logistics research seminar, SEPRO group. Bogota, Colombia

Invited speaker: Traffic and Congestion Effects of Urban Last-Mile Deliveries. Measuring Impact and Assessing Policy Measures.   *December 2021*

2021 MIT SCALE Latin America Conference. Cambridge, MA

Two papers presented: *March 2021*

· Traffic and Congestion Effects of Urban Last-Mile Deliveries. Measuring Impact and Assessing Policy Measures.
· Observatory of Urban Transport of Cargo OTUC-QUITO.

Institute of Industrial and Systems Engineers IISE Latin America Conference. Quito, Ecuador

Invited speaker. Big Data and Machine Learning Workshop using Orange   *March 2020*

MIT Global SCALE Network Supply Chain Research Expo. Cambridge, MA

Presented paper: Traffic and Congestion Effects of Urban Last-Mile Deliveries. Measuring Impact and Assessing Policy Measures   *January 2020*

International Conference on Industrial Engineering Hosted by SISE & USFQ. Quito, Ecuador

15 Minutes Talk: Freight Trip Generation Modeling and Data Collection Processes in Latin American Cities.Modeling Framework for Quito and Generalization Issues   *February 2019*

2018 MIT SCALE Latin America Conference. Cambridge, MA

Student Paper Competition: Freight Demand Estimation in High Commercial Density Areas as a Next Step in the km2 Methodology   *April 2018*

· Best Student Paper Award

ACADEMIC ACHIEVEMENTS AND RECOGNITIONS

Invited Reviewer

· OR Spectrum (ORSP) Journal
· 2021 MIT SCALE Latin America Conference
· INGENIARE. Chilean Journal of Engineering

MITx MicroMasters in Supply Chain Management   *May 2020*

· MITx Community TA Certificate of Excellence

MIT GCLOG Program   *July 2019*

· Micro Supply Chain Management - Best Growth Strategy Award
· Supply Chain Resilence Evaluation And Mitigation (SCREAM) Game - Best Strategy Award

2018 MIT SCALE Latin America Conference

Best Student Paper Award   *April 2018*

· Won the first place in the student paper competition among six competitor teams from all around Latin America. Granted 50% Scholarship to the MIT GCLOG program.

CERTIFICATIONS AND CREDENTIALS

CITI Program: Human Research, Social Behavioral Research Investigators
· Under requirements set by: Massachusetts Institute of Technology Affiliates.   *January 2020*

HarvardX Data Science Professional Certificate
In progress   *January 2020 - Present*

Lean Six Sigma Green Belt
74h Certification   *2019 - 2020*

MITx Computational Thinking using Python
· MITx - 6.00.1x Introduction to Computer Science and Programming Using Python. Final grade 97%

International research projects fundraising. Project design for capacity building grants.
16h Certification. SHIFT Academy.   *2018*

ADDITIONAL

Languages

· Spanish [Native], English [Fluent. IELTS: 8.0. TRF Number: 20EC000448PUEB007A], Portuguese [Basic], German [Basic], French[Basic].

Software Skills

· Python, Keras, Tableau, R, Unix & Slurm scripting for HPC, SQL, LaTeX, AMPL, HTML, VBA, Discrete events simulation.

Extra Curricular

· Institute of Industrial and Systems Engineers. Student Chapter Vice-President 2014-2015.

Volunteering Work

· Catholic Missionary: Conferences speaker, groups and individuals guidance.