

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 *September 2020 - 2021*

MicroMasters in Statistics and Data Science

· 2/5 Completed courses.

Massachusetts Institute of Technology MIT. Cambridge, MA *May 2019 - April 2020*

MIT-SCALE Graduate Certificate in Logistics and Supply Chain Management (GCLOG)

Massachusetts Institute of Technology on edX *September 2018 - September 2019*

MicroMasters in Supply Chain Management

Universidad San Francisco de Quito. Quito, Ecuador *May 2013 - June 2018*

Industrial Engineering

RESEARCH AND WORK EXPERIENCE

Research 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 and Supply Chain Management.

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.
- 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), "Data-driven Solutions for Evaluating and Planning Last Mile Operations in Latin America: A Methodological Approach Focused in Quito, Ecuador", 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), "Freight Trip Generation Modeling and Data Collection Processes in Latin American Cities. Modeling Framework for Quito and Generalization Issues", Transportation Research Part A: Policy and Practice, Volume 132, Pages 226-241, ISSN 0965-8564, DOI:10.1016/j.tra.2019.10.013

Traffic and Congestion Effects of Urban Last-Mile Deliveries. Measuring Impact and Assessing Policy Measures

Research paper - Main Author.

· Working paper.

Optimization of Distribution of Humanitarian Aid: Cotopaxi Volcano

Research paper - Secondary author.

· Working paper.

Machine Learning Methods Applied to Last Mile Routing Solutions. MIT-Amazon Last Mile Research Challenge.

Research paper - Main author.

· Working paper.

CONFERENCES AND SEMINARS

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

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 Resilience 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

5/9 Completed Courses

January 2020 - Present

· HarvardX - PH125.1x Data Science: R Basics

· HarvardX - PH125.2x Data Science: Visualization

· HarvardX - PH125.3x Data Science: Probability

· HarvardX - PH125.4x Data Science: Inference and Modeling

· HarvardX - PH125.5x Data Science: Productivity Tools

Lean Six Sigma Green Belt

74h Certification

2019 - 2020

MITx Computational Thinking using Python

1/2 Completed Courses

2018-2020

· 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.], Portuguese [Basic], German [Basic], French[Basic].

Software Skills

· Python, R, Unix & Slurm scripting for HPC, SQL, Tableau, L^AT_EX, AMPL, HTML, CSS, 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.