

# BERNARDO DAVID PUENTE MEJIA

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## EDUCATION

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**Massachusetts Institute of Technology MIT on edX<sup>1</sup>** *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

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**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

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**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.

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<sup>1</sup>All updated degree grades and transcripts can be found in my personal website.

**Universidad San Francisco de Quito USFQ. Quito, Ecuador**

*Teaching Assistant*

*September 2017 - September 2018*

· Undergraduate Courses: Logistics, Simulation, Data Management.

## RESEARCH AND PUBLICATIONS

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### **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.*

· Paper under review.

## CONFERENCES AND SEMINARS

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### **2021 MIT SCALE Latin America Conference. Cambridge, MA**

*Two papers accepted for presentation during the conference*

*March 2021*

### **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

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### 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

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### 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

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### Languages

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

### Software Skills

- Python, R, Unix & Slurm scripting for HPC, SQL,  $\text{\LaTeX}$ , 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.