



# Lorena Ortiz Méndez

## SUMMARY

Civil Engineer from the Pontificia Universidad Javeriana Cali, Master in Building Engineering from the Politécnico di Torino, Italy, with experience in Works Management, personnel management, and Teaching of Engineering Materials, Environmental Engineer of civil works and Statics in the Pontifical Javeriana University. Professional with teaching methodology, ability to lead and/or work with multidisciplinary and multifunctional teams, ability to develop and promote staff. Strategic and systemic thinking, high dedication to service to internal and external clients, emphasis on cost analysis, results and figures

## WORK EXPERIENCE

### **Researcher in budget and cost control management project at InfraTo (Turin Infrastructure Company)**

Location: Italy, June 2022 – to date

- Development of platforms that allow the management of the construction of the work: Extension of the line 1 of the metropolitan of Turin, providing project managers with an effective administration of the program, costs, quality, safety, scope and function of a project
- Analysis and engineering of the Client's management processes with special reference to economic-financial planning processes, integration of project and corporate accounting, planning management and economic-financial monitoring of the portfolio of corporate projects.
- Reorganization of the work team according to process reengineering.
- Financial planning with attention to the management of economic frameworks and business plans of the interventions (processing, updating and integration with documents and processes between the Office of the Project Manager and the Administration, Finance, Control and Technical Area sectors of InfraTo).
- Preparation of comparative reports between: budget, contract, payments, state of progress of work.



Torino – Italia



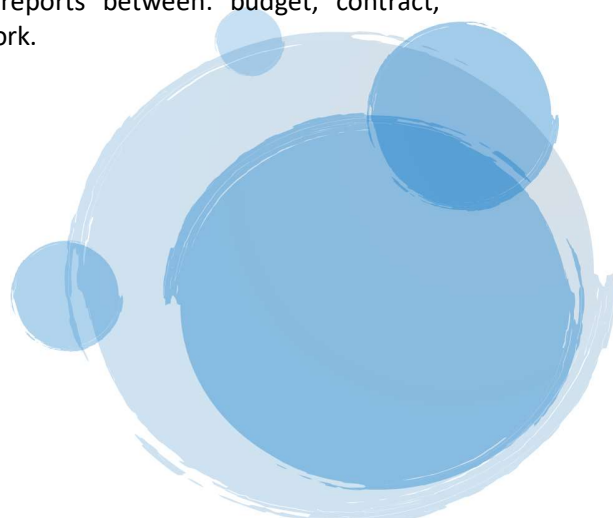
(+39) 3294644423  
Wp: (+57) 3176797166



[lorenatizor12@gmail.com](mailto:lorenatizor12@gmail.com)



<https://www.linkedin.com/in/lorena-ortiz-mendez-eng/>





### **Cost Control and Budget Engineer at Constructora Jaramillo Mora**

Location: Cali – Colombia, April 2018 – May 2022

- Manage the monthly report of the project execution budget.
- Carry out cost control during the execution of the project for the timely detection of cost deviations that arise with respect to the initial budget, making the pertinent projections in order to achieve budget execution effectively in all projects located in the sector. Kachipay – more than 7 building projects.
- Prepare the additional and deductible costs, product of the modifications requested by the project area.
- Manage the margin of the projects under its control in accordance with the technical designs that have been received after the release for sale, as well as the changes requested by management or price changes of high-impact inputs, in response to changes in the margin or an increase in the selling price required to maintain it.
- Coordinate field visits in case the contest requires it.

WORKS: Kachipay Sector (more than 7 projects of reinforced concrete buildings), projects in the Ciudad Country sector (houses), D-ko- (Building), Miralagos (reinforced concrete building project in Alfaguara), CasaAzul (Condominium of houses in Alfaguara)

### **Site Engineer at Constructora Bolívar**

Location: Cali – Colombia, July 2016 – April 2018

- Ensure the proper execution of the work and compliance with the contract.
- Monitoring and control of each of the budget items, technical specifications for 2000 houses

### **Site Engineer Assistant for Structure at Constructora Bolívar**

Location: Cali – Colombia, 2012 – 2013

- Ensure the proper execution of the work and compliance with the contract.
- Complement the monitoring and control of each of the budget items, technical specifications for 2000 homes.

Works: La Bocha Spring (Buildings in Cali)





## ACADEMIC EXPERIENCE

**External Professor of Project Management at the Master's Degree and Permanent Training School- Specialising Master's Programmes and Lifelong Learning School- (SCMAST)- Master 2° level in railways mobility industry: Train 4ME**

Location: Politecnico Di Torino - Italy, March 2023 – present

**External Collaborating Professor of Project Management in the Department of Management and Production Engineering (DIGEP)**

Location: Politecnico Di Torino - Italy, June 2022 – present

**Tutor in implementation of Project Management with SACMI.**

Location: Politecnico Di Torino - Italy, June 2022 – present

**Professor of the Department of Statics of Structures**

Location: Universidad Javeriana Cali – Colombia

July 2019 – May 2022

**Professor of Environmental Engineering of the civil works program**

Location: Universidad Javeriana Cali – Colombia

July 2018 – december 2018

**Professor of the Materials Engineering academic program**

Location: Universidad Javeriana Cali – Colombia

July 2016 – december 2016

## Publications

**Building Information Modeling for Risk Management: A Literature Review.** In: International Conference on Business and Technology, ICBT 2022, bhr, 2022, pp. 3-10. ISSN 2367-3370. ISBN: 978-3-031-26952-3  
Istanbul, Türkiye

2022

**Indexed in Scopus with code: 2-s2.0-85151162509**

## Design

**Structural Design of Housing in Condominium "Fontana de las Mercedes". 2-level house with embedded reinforced concrete system**

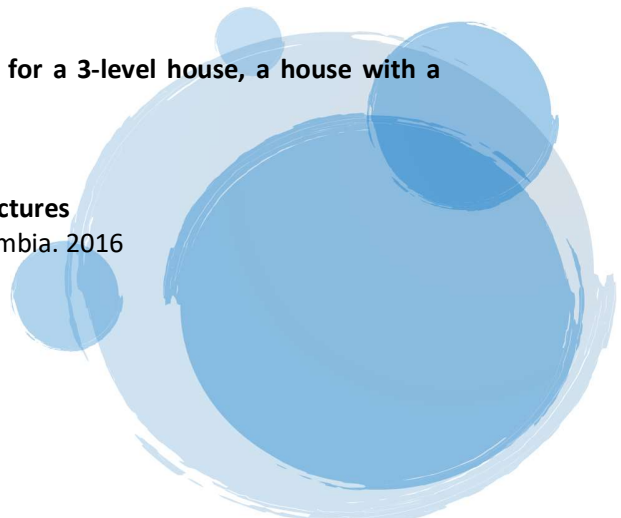
Location: Cali – Colombia. 2021

**Structural reinforcement design for a 3-level house, a house with a reinforced concrete system**

Location: Cali – Colombia. 2020

**Design engineer of concrete structures**

Location: HINCACOM, Cali – Colombia. 2016





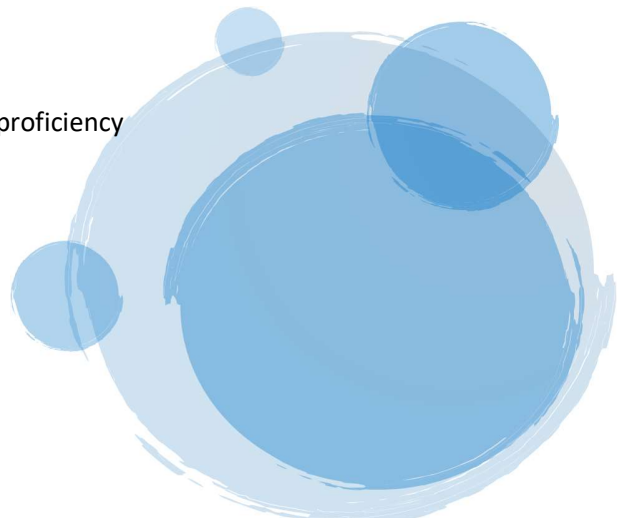
## Education

- **Master's Degree in Building Engineering**  
**Politecnico di Torino, Italy**  
102/110 final mark  
Aim of the thesis includes some aspects of the theory, design, and some structural controls of a tensile structure as a roof solution for a sport center with a long-distance span  
Skills: Facility Management (FM)  
Themes of interest. Relief and urban design, Experimentation of materials, models and structures, Technical Hydraulics, Thermophysics of buildings, Integrated Design of Structures, Special Structures, Construction technology, Work Programming, Recovery and conservation of Buildings, Foundations and accessories techniques to build, seismic engineering, computational methods in structural engineering design, cost control and work budgets.  
Italia – marzo 2016
- **Bachelor's Degree in Civil Engineering**  
**Pontificia Universidad Javeriana, Colombia**  
4,4/5 final mark  
Skills: Structural Engineering · Facility Management (FM).  
Interesting Topics. Construction administration and programming, Statics, Analysis of structures, Construction techniques, Solid mechanics, reinforced concrete fundamentals, Design of reinforced concrete structures, Geology, Soil mechanics, Engineering materials, Matrix and dynamic analysis.

## Additional Education

- Participation in the IX National Congress of Seismic Engineering, Cali, Colombia 2019
- Seminar on Durability of Concrete Structures, in Argos, Cali Colombia 2017
- ETABS Course, at the Pontificia Universidad Javeriana Cali, Colombia 2012
- Seminar Workshop on Leadership Training, at the Pontificia Universidad Javeriana Cali, Colombia 2012
- Participation in the University Conference on Road Safety, at the Pontificia Universidad Javeriana Cali, Colombia, 2010

## Languages

- English Professional working proficiency
  - **Spanish Mother tongue**
  - **Italian Fluent**
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## TRAININGS, CERTIFICATIONS, AWARD

- **Master of science and Bachelor degree-Double Degree**  
Issued by Pontificia Universidad Javeriana · Jul 2012  
Associated with Politecnico di Torino  
Double Degree between Pontificia Universidad Javeriana and Politecnico di Torino
- **Constructora Bolivar Scholarship**  
Issued by Constructora Bolivar · Mar 2012  
Associated with Constructora Bolivar S.A
- **Magis Scholarship**  
Issued by Pontificia Universidad Javeriana Cali · Feb 2009  
Associated with Pontificia Universidad Javeriana  
Scholarship maintained throughout the degree for excellent academic average

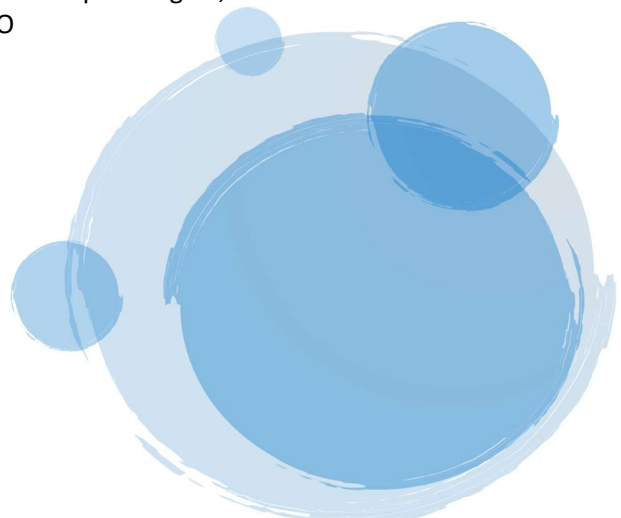
## Professional skills

- Preparation of budget for works
- Task planning
- Preparation and validation of technical specifications
- Organization and time management

## Personal skills

- Project management
- Great analysis capacity
- Effective communication
- Staff coordination
- Continuous learning

## Technical skills

- ERP SAP (controlling CO, production planning PP, Materials management MM), ERP SINCO
  - MS Office (also Ms Project)
  - AutoCAD, BIM 360 Autodesk
  - ETABS
  - SAP2000
  - DOLMEN
  - PYTHON
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## References

Carlo Caldera  
Professor at Polytechnic of Turin, Italia  
Tel: +39 331 679 5998

Orlando Cundumi Sánchez  
Director of the civil engineering department  
Pontificia Universidad Javeriana, Cali, Colombia  
Tel: +57 315 6160242

Alberto de Marco  
Professor at Polytechnic of Turin, Italia  
Tel: + 39 334 888 3065

