

EDUCATION

- University of Illinois at Urbana-Champaign** Champaign, USA
M.Sc.in Sustainable and Resilient Infrastructure Systems 2018–2020
- Thesis: “On practical metrics for network infrastructure reliability”
- Universidad de Buenos Aires** Buenos Aires, Argentina
Professional Engineering Degree in Civil Engineering 2010–2016
- Final Project: “Provision of Urban Water Infrastructure for the city of San Antonio de Areco”

EXPERIENCE

- Inter-American Development Bank** Buenos Aires, Argentina
Transportation Consultant 2020–Current
- Flagship Report on Social Exclusion in Transportation
 - Developed literature review, theoretical models, data analysis for the impact of the COVID-19 pandemic on urban mobility
 - Developed literature review, framework and data analysis for the role of motorized urban transportation to accessibility of urban dwellers in Latin America and the Caribbean
 - Effects of the COVID-19 pandemic on public transit operators
 - Designed, disseminated and analyzed along with the urban transportation team a survey investigating the financial and operational impact of the pandemic on operators
 - Wrote final report with literature review on practices of the region and media communications
 - Impact of Shared Mobility on Urban Transportation
 - Collaborated in a team analyzing the causes for adoption of TNCs (Uber, Cabify, Didi)
 - Performed data analysis, modelling and write-ups of impacts on transport related social exclusion
- University of Illinois at Urbana-Champaign** Illinois, USA
Graduate Research Assistant/Multi-Hazard Approach to Engineering Research (MAE) Group 2018-2020
- Resilience and Reliability Analysis of Critical Infrastructure
 - Performed review and theoretical development of reliability for transportation infrastructure under flood hazards
 - Development of multi-commodity optimization coupled with Markov-chain Montecarlo simulations for resilience assessment
- Abnormal Load Engineering (ALE)** Buenos Aires, Argentina
Solutions Engineer 2016-2018
- San Martín Viaduct Installation
 - Proposed and budgeted bespoke solutions for construction of urban viaduct with ongoing train operations
 - Conducted and participated in client meetings, drafting, preliminary calculations and contract write-up
 - Argentinian RENOVAR Wind Farm Logistics
 - Trained and drafted a summary technical-commercial report of the operations ongoing in ALE Thailand as a guide for the Argentinian operations between 2016 and 2019

- Developed key relationships and secured logistic routes for the development of wind farms in Argentina, from port reception to assembly of 120m towers in site.

Proyectos y Estudios Especiales (PEESA)

Buenos Aires, Argentina

Project Engineer

2013-2014

- Provincial Route N°23 in Río Negro, Argentina
- Implemented new Excel scripts for budgeting and creating traffic projections and Civil3D solutions for quantity estimations in project control, increasing cost analysis process flow
- National Route N°18 in Entre Ríos, Argentina
- Supported engineering team in budgeting, designing, drawing, and performing feasibility studies

PUBLICATIONS

- [1] J. P. Bertucci, “Mitigating the effects of the pandemic on poverty and inequality - rebuilding the transportation landscape for an inclusive recovery”, in *2021 Leveraging transport for socially inclusive development: defining a trajectory for LA&C*, Jan. 2022, forthcoming.
- [2] J. P. Bertucci and J. D. Barahona, “Coverage and quality of public transportation: signature of healthy urban development”, in *2021 Leveraging transport for socially inclusive development: defining a trajectory for LA&C*, Jan. 2022, forthcoming.
- [3] J. P. Bertucci and P. Gardoni, “On practical metrics for network infrastructure reliability”, in *2020 Ideals*, Aug. 2020, pp. 1–33.

TEACHING

- **Teaching Assistant** at University of Buenos Aires 2013
Non-Traditional Materials in Construction (91.14)

SKILLS

- **Coding** R, Matlab, Python
- **Hydraulics:** WaterCad, EPA, HEC
- **Transportation:** CIVIL3D, QGIS, RAM
- **General Purpose:** Office, Autocad, CRM

LANGUAGES

- **Spanish:** Native
- **English:** Bilingual
- **French:** Basic

SCHOLARSHIPS AND AWARDS

- Fulbright Scholar 2018–2020
- Argentine Presidential Fellowship In Science and Technology 2017

SELECTED VOLUNTEER ACTIVITIES

- Board Member at Fulbright Association Urbana-Champaign Chapter 2018–2020
Coordinated group meetings of the student Fulbright chapter of the University of Illinois at Urbana-Champaign
- Office of Inclusion and Intercultural Relations (Global Leaders Program) 2018–2020
Aided in coordination and preparation of events promoting the inclusion of international students
- YMCA at Urbana-Champaign 2018–2020
Collected and organized donations for the dump-and-run sales at the beginning of the academic year
- Engineers without Borders 2016–2018
Construction of the La Cárcova Maternal Care unit in the neighbourhood of José Leon Suarez