

EDUCATION

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| University of Illinois at Urbana Champaign | Champaign, USA |
| M.Sc.in Sustainable and Resilient Infrastructure Systems, Advisor: Paolo Gardoni | 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 |
| – Thesis: “Provision of Water Infrastructure for the city of San Antonio de Areco” | |

EXPERIENCE

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| 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 Transportation Network Companies on Urban Mobility | |
| – Collaborated in a team analyzing the causes for adoption and impact of TNCs in moder urban mobility | |
| – Data analysis and clustering models on a contracted survey | |
| 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 | |
| – Literature review and theoretical development of the reliability of critical 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 | |
| – Traced and budgeted solutions from bid stage to design, proposing alternative competing designs to complete construction with ongoing train operations | |
| – Conducted and participated in client meetings, drafting, preliminary calculations and contract write-up | |
| – Argentinian 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 operations to assembly of 120m towers in site.

Proyectos y Estudios Especiales

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 and P. Gardoni, “On practical metrics for network infrastructure reliability”, in *2020 Ideals*, Aug. 2020, pp. 1–33.
- [2] D. Oviedo, J. Arellana, O. Sabogal, L. Guzman, C. Moncada, L. Scholl, and J. P. Bertucci, “Placeholder Paper Title”, in *2018 Cities in lockdown: Mobility and access inequalities stemming from COVID-19 in urban Colombia*, Apr. 2018, pp. 1234–1235.

TEACHING

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

SKILLS

- **Coding** R, Matlab, Python, Gurobi
- **Hydraulics:** WaterCad, EPA, HEC
- **Structures:** RAM, SAP
- **General:** Autocad, Office

LANGUAGES

- **Spanish:** Native
- **English:** Fluent
- **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 and mediated in 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