

**VERONICA MARRERO – TRUJILLO**

University of Colorado Boulder

Email: [veronica.marrero@colorado.edu](mailto:veronica.marrero@colorado.edu)**EDUCATION**

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| <b>University of Colorado Boulder</b>   | Aug. 2022 - Present |
| Ph.D. student, Strategy, Entrepreneurship and Operations at Leeds School of Business  | Boulder, CO, USA    |
| <b>Universidad Nacional de Colombia</b>   | Dec. 2021           |
| Master's in Engineering – Energy Systems  | Medellín, Colombia  |
| <i>Thesis:</i> A microworld for learning about the diffusion of non-conventional renewable electricity generation technologies in Colombia. Available at: <a href="https://www.energetica2030.co/micromundo/">https://www.energetica2030.co/micromundo/</a> |                     |
| <i>Coursework:</i> System Dynamics, System Thinking, Operations Management, Uncertainty Decisions.  |                     |
| <b>Universidad Nacional de Colombia</b>   | Jul. 2018           |
| Bachelors of Industrial Engineering   | Medellín, Colombia  |

**RESEARCH EXPERIENCE**

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| <b>Member of Decision Sciences Research Group</b>   | Aug. 2018 – Present   |
| Universidad Nacional de Colombia.   | Medellín, Colombia    |
| <b>Junior Researcher</b>  | Dec. 2020 – Present   |
| Facultad de Ingeniería, Universidad de Antioquia.   | Medellín, Colombia    |
| <ul style="list-style-type: none"> <li>• Researching sustainability of socio-ecological systems in strategic catchment areas in contexts of environmental change.</li> <li>• Application of the Wayfinder guide.</li> </ul>   |                       |
| <b>Student Researcher</b>   | Aug. 2018 – May 2021  |
| Facultad de Minas, Universidad Nacional de Colombia. Energética 2030 Project.   | Medellín, Colombia    |
| <ul style="list-style-type: none"> <li>• Developed simulations for a learning platform about Renewable energy in Colombia.</li> <li>• Designed a simulation model for evaluating the effect of energy auctions in renewable energy adoption in Colombia.</li> </ul> |                       |
| <b>Student Researcher</b>   | Oct. 2019 – Dec. 2019 |
| Facultad de Minas, Universidad Nacional de Colombia and Aarhus University.  | Medellín, Colombia    |
| <ul style="list-style-type: none"> <li>• Designed and executed economic experiments in energy markets and organizational behavior.</li> </ul>   |                       |
| <b>Student Researcher</b>   | Aug. 2018 – Dec. 2018 |
| Facultad de Minas, Universidad Nacional de Colombia. WWF Colombia.  | Medellín, Colombia    |
| <ul style="list-style-type: none"> <li>• Systemic analysis of deforestation drivers in Colombia.</li> <li>• Developed causal loop diagrams for deforestation drivers in Colombia.</li> </ul>  |                       |

**TEACHING EXPERIENCE**

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| <b>Lecturer</b>  | Feb. 2020 – Jun. 2022 |
| Engineering Department, Institución Universitaria Politécnico Granacolombiano.   | Medellín, Colombia    |
| <ul style="list-style-type: none"> <li>• Teach and design theoretical and practical undergraduate courses such as Production Management, Occupational Safety and Health Administration, and Decision-making models. Teaching of theory and practical courses.</li> </ul> |                       |

- Grade tests and homework related to production systems and mathematical models in operations management.
- Advise undergraduate students in their course's projects during the semester, and the development of their dissertations.

### Teaching Assistant

May. 2020 – Sep. 2020

Department of Computer Sciences and Decisions, Facultad de Minas,  
Universidad Nacional de Colombia.

Medellín, Colombia

*Advisor:* Gloria Patricia Jaramillo, Ph.D.

- Taught theory and practical classes of graduate course: Decisions Under Uncertainty in Organizations.
- Designed and graded homework related to mathematical models for decision-making processes.
- Advised master students in the development of coursework in Decisions Under Uncertainty in Organizations course.

### Lecturer

Aug. 2018 – May. 2020

Department of Computer Sciences and Decisions, Facultad de Minas,  
Universidad Nacional de Colombia.

Medellín, Colombia

*Advisor:* Santiago Arango-Aramburo, PhD.

- Taught theory and practical classes of undergraduate course: Systems Dynamics.
- Designed and graded homework related to causal relations and stocks and flows simulations.
- Advising undergraduate students in semestral projects on the System Dynamics course.

### Teaching Assistant

Jan. 2017 – Jul. 2018

Department of Computer Sciences and Decisions, Facultad de Minas,  
Universidad Nacional de Colombia.

Medellín, Colombia

*Advisor:* Santiago Arango-Aramburo, PhD.

- Designing and grading of tests and homework of undergraduate course: Systems Dynamics.
- Advising undergraduate students in semestral projects on the System Dynamics course.

## HONORS AND AWARDS

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**Academic rights waiver scholarship** for the Master's in Engineering – 2018 – II, 2019 – I, 2019 – II & 2020 – Energy Systems at Universidad Nacional de Colombia. I

## PUBLICATIONS

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Arias-Gaviria, J., Suarez, C.F., **Marrero-Trujillo, V.** et al. Drivers and effects of deforestation in Colombia: a systems thinking approach. Reg Environ Change 21, 91 (2021). <https://doi.org/10.1007/s10113-021-01822-x>

## WORKING PAPERS

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**Marrero-Trujillo, V;** Arias-Gaviria, J; Arango-Aramburo, S; Larsen, E. A microworld for learning about the diffusion of non-conventional Renewable electricity generation technologies in Colombia.

**Marrero-Trujillo, V;** Arias-Gaviria, J; Arango-Aramburo, S. Explosión de energía solar en Colombia ¿una utopía o un escenario posible? (Solar energy explosion in Colombia: a utopia or a possible scenario?)

**Marrero-Trujillo, V;** Baena, D; Berrio, L; Berrouet, L; Villegas, C; Ezzine-de-Blas. Understanding the complexity of sustainable trajectories of a Socio-ecological System through the Wayfinder Guide. An application in the Tropical Andes (Colombia)

## PRESENTATIONS

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**Marrero-Trujillo, V;** Arias-Gaviria, J; Arango-Aramburo, S. A microworld for learning about the diffusion of non-conventional Renewable electricity generation technologies in Colombia. 38<sup>th</sup> International Conference of the System Dynamics Society, 2020.

## ADDITIONAL COURSEWORK

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| <b>University of Michigan/Coursera</b><br>Python for Everybody  | May.2020 – Dec. 2020<br>Online  |
| <b>Universidad de los Andes/Coursera</b><br>Sustainable Development Goals for Latin America and the Caribbean | Oct. 2020<br>Online             |
| <b>Stanford online/Coursera</b><br>Writing in the Sciences  | Aug. 2019 – Oct. 2019<br>Online |

## SKILLS

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| <i>Computer skills:</i> | Microsoft Office (Word, Excel, PowerPoint), Python, PowerSim, Vensim, Stella Architect. |
| <i>Languages:</i>       | Spanish (native), Proficiency in English  |