

Contact Information

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Skills

Mathematical expertise

Analytical and problem-
solving

Programming: R, Python,
Minitab, HTML

Statistical consulting

Critical thinking and
attention to detail

FERNEY HENAO-CEBALLOS

A Ph.D. student always looking to learn new skills, take on extra responsibilities, and grow professionally.

EDUCATION

Iowa City, United States
Aug 2023 - Present

Doctor of Philosophy in Biostatistics
University of Iowa

GPA:
Thesis:
Expected graduation: May 2027

Mayagüez, Puerto Rico
Jan 2020 - Jun 2023

Master of Science in Mathematics, Statistics Option
University of Puerto Rico at Mayagüez

GPA: 4.00/4.00
Passed Probability Qualifying Exam: January 2021
Thesis in progress: Censored zero-inflated Poisson regression model: predicting success in undergraduate math courses
Expected graduation: May 2023
Advisor: Raúl E. Macchiavelli, PhD

Medellín, Colombia
Jan 2014 - Jun 2019

Bachelor of Mathematics
University of Antioquia

GPA: 3.69
Thesis: Optimal stopping time on productive process with finite horizon
Advisor: Ricardo Restrepo-López, PhD

EDUCATION WORK EXPERIENCE

Mayagüez, Puerto Rico
Jan 2020 - Present

Teaching Assistant
Department of Mathematical Sciences
University of Puerto Rico at Mayagüez

- Teaching of Pre-Calculus I and Statistics.
- Teaching assistant for Calculus II, Pre-Calculus I and Pre-Calculus II.
- Editor for lecture notes on Pre-Calculus I.
- Teaching in the Math Strengthening Institute (CRRSAA grants).
- Tutoring in the Math Support Center (CRRSAA grants).
- Tutoring in the Summer Math Camps for freshmen (CRRSAA grants).

Mayagüez, Puerto Rico
Aug 2020 - Present

Teaching Assistant
Puerto Rico Mathematics Olympiads (OMPR)

- Student training for math competitions.
- Creation and review of problems for national and international math competitions.
- Grading math Olympiad exams.
- Judge in school math competitions.
- Contributing editor in the annual edition of OMPR books.

Rionegro, Colombia
Jul 2019 - Dec 2019

High School Teacher
Colegio El Divino Niño

- Teaching of Algebra & Trigonometry.

Medellín, Colombia
Jan 2016 - Dec 2018

Teaching Assistant
Antioquia Government Scholarships

- Tutoring in the Math Support Center of the University of Antioquia.

RESEARCH EXPERIENCE

Graduate Research

- Generalized linear models, censored data, zero-inflated data, computation in statistics.
- Predict success in introductory math classes.
- Perception of math competitions.

Undergraduate Research

- Probability, stochastic processes, Markov processes, optimal strategies.

PUBLICATIONS

Akveld, M., Cáceres, L., Crawford, D., & **Henao, F.** (2022). The perceived impact of mathematics competitions on teachers and their classrooms in Puerto Rico, Switzerland and the UK. *ZDM - Springer*, 54, 1009-1025.
<https://doi.org/10.1007/s11858-022-01414-x>

Akveld, M., & **Henao, F.** (2021). The impact of mathematics competitions in schools, a comparative study between Puerto Rico, Switzerland and the UK. *Bulletin des VSMP*, 147, 15-19.

Cáceres, L., & **Henao, F.** (2021). Mathematics competitions, a perspective from Puerto Rican teaching. *Espacio Matemático*, 2, 68-82. DOI: 10.48082/espmat-v02n01a21p06.

Cáceres, L., Colón, O., Gutiérrez, D., **Henao F.**, Jiménez, J. A., López, S. M., Ortega, J. S., Portnoy, A., & Vélez, A. (2021). *Problems and Solutions: Mathematics Olympiads in Puerto Rico 2020-2021*. University of Puerto Rico Publications.

Henao, F. (2019). *Optimal stopping time on productive process with finite horizon* [Undergraduate thesis, University of Antioquia]. Institutional Repository of the University of Antioquia.

PRESENTATIONS

"The perceived impact of mathematics competitions on teachers and their classrooms in Puerto Rico, Switzerland and the UK." *Mathematical Sciences Research Seminar*, Costa Rica Institute of Technology, San José, Costa Rica, August 2022.

"The perceived impact of mathematics competitions on teachers and their classrooms in Puerto Rico, Switzerland and the UK." *XXXVII Interuniversity Mathematical Sciences Research Seminar*, Mayagüez, Puerto Rico, February 2022.

"Optimal stopping time on productive process with finite horizon." Undergraduate Thesis Defense, *VII Symposium in Exact and Natural Sciences*, Medellín, Colombia, May 2019.

CONFERENCES ATTENDED

The 2022 SACNAS National Diversity in STEM Conference, San Juan, Puerto Rico, 2022.

XXXVII Interuniversity Mathematical Sciences Research Seminar, Mayagüez, Puerto Rico, 2022.

XXX Annual Kangaroo Meeting of the Association Kangourou sans Frontières, Cervia, Italy, 2022. (Online)

XXIX Annual Kangaroo Meeting of the Association Kangourou sans Frontières, Antwerp, Belgium, 2021. (Online)

XXVIII Annual Kangaroo Meeting of the Association Kangourou sans Frontières, Switzerland, 2020. (Online)

XXXV Interuniversity Mathematical Sciences Research Seminar, Cayey, Puerto Rico, 2020.

VII Symposium in Exact and Natural Sciences, Medellín, Colombia, 2019.

CERTIFICATIONS

Distance Education Certificate, Division of Continuing Education and Professional Studies of the University of Puerto Rico at Mayagüez (2021).

REFERENCES



Raúl E. Macchiavelli, PhD

Professor and Dean of the College of Agricultural Sciences
University of Puerto Rico at Mayagüez
Email: raul.macchiavelli@upr.edu
Relationship: Graduate Advisor



Luis F. Cáceres-Duque, PhD

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Director of the Puerto Rico Mathematics Olympiads
University of Puerto Rico at Mayagüez
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Relationship: Research Group and OMPR Director



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University of Puerto Rico at Mayagüez
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Relationship: Graduate Assistantship Supervisor