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# CURRICULUM VITAE

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## LUIS CAICEDO TORRES

### CONTACT

[lcaic005@fiu.edu](mailto:lcaic005@fiu.edu)

Department of Mathematics and Statistics  
Florida International University | Miami, FL 33199

### EDUCATION

Ph.D (presently enrolled) Florida International University Applied Mathematics 2022

Bachelors Of Science Florida International University Mathematical Sciences 2016

### RESEARCH INTERESTS & CURRENT PROJECTS

Partial Differential Equations | Nonlinear Analysis | Nonlocal Operators | Numerical Analysis

Fractional-in-Time Schrödinger Equations

*In Progress*

Advisor: Dr. Ciprian Gal

### PAPERS AND PAST PROJECTS

[2] Luis Caicedo Torres, L. Pereira, and M. Amini. "A Survey on Optimal Transport for Machine Learning: Theory and Applications." *arXiv e-prints (2021): arXiv-2106*.

[1] L. Pereira, Luis Caicedo Torres, and M. Amini. "A Survey on Optimal Transport for Machine Learning: Theory and Applications." *Operations Research Forum. Vol. 2. No. 2. Springer International Publishing, 2021. (Best Paper Award)*

### RESEARCH EXPERIENCE FOR UNDERGRADS (AS A MENTOR)

[2] Luis Caicedo Torres, C. Fraga, J. Pascual, G. Sanchez. "Topological Data Analysis for Time Series Forecasting". 2021.

[1] M. Alvarez, Luis Caicedo Torres, G. Sanchez. "Clustering in Financial Time Series". 2021

### DIRECTED READING PROGRAM (AS A MENTOR)

[2] Luis Caicedo Torres, J. Pascual. "Simulating Evolution Homology for Protein Dynamics". 2022. *In progress*.

[1] F. Afzali, Luis Caicedo Torres. "Brownian Motion and the Heath Kernel". 2020.

### FULL-TIME ACADEMIC EXPERIENCE

Graduate Assistant Florida International University 01/2018 - Present

### TEACHING EXPERIENCE

Graduate Assistant 01/2018 - Present

Dept. of Math and Stats, FIU

- Taught Precalculus (Fall 2020), Calculus 1 (Summer/Fall 2021)
- Held office hours for students taking Calculus 1-3, Differential Equations, Theory of Algorithms, Combinatorics, etc.
- Led recitation sessions to encourage problem solving skills and nurture classroom community to improve student engagement and passing rates.

Mathematics Tutor

01/2014 - 04/2017

Center for Academic Success, FIU

- Tutored students across an array of mathematics, finance, and accounting classes in both an individual and group basis.

**PROFESSIONAL INVOLVEMENT**

Graduate Student Seminar Organizer 08/2019 - 01/2022

Student in Graduate Mathematics Association at FIU 08/2021 - Present  
*President*

Presenter (postponed) 01/2022  
*Superdiffusive Fractional-In-Time Wave Equations*  
 Joint Mathematics Meetings

Presenter 10/2019  
*Introduction to Reinforcement Learning Algorithms*  
 Graduate Student Seminar, Dept. of Math and Stats, FIU

**AWARDS**

Outstanding Student Life: Service Award 2021  
 Florida International University