

# Leticia Mattos Da Silva

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## Education

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Massachusetts Institute of Technology Ph.D. in Computer Science, advised by Justin Solomon	Sept. 2021 – <i>present</i>
Massachusetts Institute of Technology S.M. in Computer Science, advised by Justin Solomon	June 2023
University of California, Los Angeles B.S. in Mathematics <i>cum laude</i>	March 2021

## Research Positions

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Pre-Doctoral Researcher Flatiron Institute, Simons Foundation, New York, NY	May – Aug. 2024
Research Scientist Intern Adobe Inc., San Jose, CA (Remote)	May – Aug. 2022
Research Intern Fields Institute for Research in Mathematical Sciences, Toronto, ON (Remote)	July – Aug. 2021
Research Intern Fields Institute for Research in Mathematical Sciences, Toronto, ON (Remote)	July – Aug. 2020
Student Researcher SMALL Research Experience for Undergraduates, Williamstown, MA	June – Aug. 2019

## Honors and Awards

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MathWorks Engineering Fellowship	2024
EECS MathWorks Fellowship	2023
Schwarzman College of Computing Fellowship funded by Google	2022
Google Lime Scholarship <i>semi-finalist</i>	2022
Distinguished Graduate Fellowship in Electrical Engineering and Computer Science	2021
Will Rogers Memorial Scholarship	2021
De Anza Physical Sciences, Mathematics, and Engineering Scholarship	2017

## Publications

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### JOURNAL ARTICLES

2. [A Framework for Solving Parabolic Partial Differential Equations on Discrete Domains](#) 2024  
*Leticia Mattos Da Silva*, Oded Stein, Justin Solomon  
ACM Transactions on Graphics
1. [Breaking Good: Fracture Modes for Realtime Destruction](#) 2022  
Silvia Sellán, Jack Luong, *Leticia Mattos Da Silva*, Aravind Ramakrishnan, Yuchuan Yang, Alec Jacobson  
ACM Transactions on Graphics

## Presentations

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### INVITED TALKS

- TBD Oct. 2024  
Graduate Student Seminar, Department of Mathematics, Tufts University
- [A Framework for Solving Parabolic Partial Differential Equations on Discrete Domains](#) July 2024  
SIGGRAPH, Denver, CO
- Variational Characterizations of Nonlinear PDE on Geometric Domains May 2024  
The Scientific AI Group, University of Texas at Austin, *hosted by Richard Tsai*

### CONTRIBUTED TALKS

- Log of Heat Equation Nov. 2021  
Graduate Women in Course 6 Research Summit, MIT
- Fracture Harmonics May 2021  
Women in Math Research Night, University of California, Los Angeles
- When Bands Play in Random Matrix Theory Aug. 2019  
Young Mathematicians Conference, Columbus, OH, with Charles Devlin VI

### POSTERS

- [Solving Parabolic PDE with MATLAB](#) April 2024  
MathWorks Day, MIT
- [Solving Parabolic PDE on Discrete Domains](#) March 2024  
ICERM Workshop *PDEs and Geometry: Numerical Aspects*, Brown University

## Academic Service

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- Graduate Applications Reviewer Jan. 2024  
EECS Department, MIT
- Teaching Assistant for *Progressive Mesh Compression*, supervised by Paul Kry July 2023  
Summer Geometry Initiative, MIT

Executive Member of New Student Orientation EECS Graduate Student Association, MIT	Jan. 2022 – Dec. 2022
Organizer of Special Session on Graduate Admissions Summer Geometry Initiative, MIT	July 2021
Student Volunteer Eurographics/ACM SIGGRAPH Symposium on Geometry Processing (SGP)	July 2021
Co-organizer of tutor training workshops Math Performance Success Program, De Anza College	Sept. 2017 – June 2018

## DEI Engagement

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Executive Member of Diversity, Equity, and Inclusion EECS Graduate Student Association, MIT	Jan. 2023 – Dec. 2023
Graduate Recruitment Effort Volunteer The Society of Hispanic Engineers (SHPE) National Convention, Salt Lake City, UT	Nov. 2023
Disability Justice Council Representative Graduate Student Council, MIT	Sept. 2021 – June 2023
Student Mentor for the Graduate Assistance Application Program EECS Department, MIT	2021 & 2022
Co-organizer of outreach program <i>Noches de Ciencias</i> Society of Latino Engineers and Scientists, University of California, Los Angeles	Sept. 2019 – March 2020

## Mentoring

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Ayyoob Berhane, prospective Undergraduate Researcher, MIT	2024
Akshata Tiwari, Undergraduate Researcher, MIT	2024
Francisco Unai Caja López, Summer Geometry Institute Fellow	2023
Anna Cole Percy, Summer Geometry Institute Fellow	2023
Matheus da Silva Araujo, Summer Geometry Institute Fellow	2023
Hossam Mohamed Saeed Gize, Summer Geometry Institute Fellow	2023
Dora Zhao, Graduate Application Mentee, <i>now at Stanford</i>	2022
Olga Guñan, Graduate Application Mentee, <i>now at CMU</i>	2021

## Teaching Positions

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### COURSES AT THE UNIVERSITY OF CALIFORNIA, LOS ANGELES

Instructor First-Year Engineering Transition Bridge: Differential and Integral Calculus	Summer 2019 & 2020
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Teaching Assistant  
Introduction to Engineering Disciplines

Fall 2019

COURSES AT DE ANZA COLLEGE

Teaching Assistant  
Intermediate Algebra, Precalculus, Integrated Statistics

Fall 2016 – Spring 2018