

LETICIA MATTOS DA SILVA

leticiam@mit.edu | lmattos.com | Room 32-D475A, 32 Vassar St, Cambridge, MA 02139

EDUCATION

Massachusetts Institute of Technology Ph.D. in Computer Science Advised by Justin Solomon at the Geometric Data Processing Group	September 2021 – <i>present</i>
S.M. in Computer Science Advised by Justin Solomon at the Geometric Data Processing Group	June 2023
University of California, Los Angeles B.S. in Mathematics <i>cum laude</i>	March 2021

RESEARCH EXPERIENCE

Research Scientist Intern at Adobe Inc. • Investigated methods for generating 3D scenes from single images • Implemented new experimental pipeline in PyTorch	May 2022 – August 2022 Mentored by Matheus Gadelha
Research Intern at the Fields Institute for Research in Mathematical Sciences • Investigated mean curvature flow in the space of sign distance functions • Implemented existing baselines in MATLAB	July 2021 – August 2021 Supervised by Alec Jacobson
Research Intern at the Fields Institute for Research in Mathematical Sciences • Implemented non-convex optimization problem using MATLAB + MOSEK • Designed experimental pipeline for realtime fracture	July 2020 – August 2020 Supervised by Alec Jacobson
Student Researcher at Williams College • Investigated distribution of eigenvalues of matrices under symmetry constraints • Implemented experiments in Mathematica	June 2019 – August 2019 Advised by Dr. Steven Miller

PUBLICATIONS

A Framework for Solving Parabolic Partial Differential Equations on Discrete Domains Leticia Mattos Da Silva MIT Libraries [Thesis PDF]	2023
Breaking Good: Fracture Modes for Realtime Destruction Silvia Sellán, Jack Luong, Leticia Mattos Da Silva , Aravind Ramakrishnan, Yuchuan Yang, Alec Jacobson ACM Transactions on Graphics [arXiv]	2022

HONORS AND AWARDS

MathWorks Fellowship In recognition of research activities and contributions to MathWorks software.	2023 – 2024
Schwarzman College of Computing Fellowship funded by Google In recognition of outstanding academic record and exceptional background.	2022 – 2023
Google Lime Scholarship Semi-Finalist Semi-Finalist to Google's Scholarship dedicated to students with disabilities in Computer Science.	2022
MIT Distinguished Graduate Fellowship in EECS Fellowship awarded to the strongest candidates admitted to the EECS Ph.D. program	2021 – 2022
Will Rogers Memorial Scholarship University wide merit based award to students with a disability	2021
Physical Sciences, Mathematics and Engineering Scholarship College wide merit based scholarship for students pursuing majors in STEM	2017

CONFERENCES AND PRESENTATIONS

Why Don't We Just Do Good? <i>Best Talk Award</i> at MIT Graduate Women in Course 6 Research Summit	October 2022
Logarithm of the Heat Equation Lightning Talk at MIT Graduate Women in Course 6 Research Summit	November 2021
Fracture Harmonics Report Talk at UCLA Women in Math Research Night	May 2021
When bands play in Random Matrix Theory Report Talk presented with Charles Devlin VI at Young Mathematicians Conference	August 2019

TEACHING EXPERIENCE

Instructor at UCLA Henry Samueli School of Engineering ENG 20: First-Year Engineering Transition Bridge	Summer 2020
Teaching Assistant at UCLA Henry Samueli School of Engineering ENG 87: Introduction to Engineering Disciplines	Fall 2019
Instructor at UCLA Henry Samueli School of Engineering ENG 20: First-Year Engineering Transition Bridge	Summer 2019
Teaching Assistant at De Anza College MATH 114: Intermediate Algebra MATH 217: Integrated Statistics Others	Fall 2016 – Spring 2018

COMMUNITY INVOLVEMENT

EECS Graduate Student Association Serving as VP of Diversity, Equity and Inclusion (DEI)	January 2022 — <i>present</i>
Disability Justice Council Representative Serving as Disability Justice Representative at the MIT Graduate Student Council	October 2021 — <i>present</i>
Society of Latino Engineers and Scientists (SOLES) Planned science outreach program for high school students	September 2019 – March 2020
Math Performance Success (MPS) Program Assisted in the training of math tutors to attend to underrepresented students	September 2017 – Spring 2018

SKILLS

Languages:
English (Fluent), Portuguese (Native)

Programming:
MATLAB, Python