

GABRIEL PASSAMANI ANDRADE

EDUCATION

University of Colorado Boulder Ph.D. in Computer Science (Expected Spring 2023)	<i>Fall 2018 - Present</i>
University of Massachusetts Amherst M.S. in Applied Mathematics	<i>Fall 2016 - Spring 2018</i>
University of Massachusetts Amherst B.S. in Pure Mathematics Minor in Philosophy	<i>Fall 2012 - Spring 2016</i>

CURRENT RESEARCH PROJECTS

University of Colorado Boulder <i>Graphical Economics with Resale</i> Adviser: Professor Rafael Frongillo	Spring 2019 - Present
University of Colorado Boulder <i>A Liquid Democratic Model of Collective Transport</i> Adviser: Professor Orit Peleg	Spring 2019 - Present
University of Colorado Boulder <i>Effects of Price Sensitivity in Algorithmic Agents on Electricity Market Dynamics</i> Advisers: Professors Rafael Frongillo and Kyri Baker	Fall 2018 - Present

PAST RESEARCH PROJECTS

Lawrence Livermore National Labs <i>Unsupervised Event Detection in Long Horizon Time Series Data</i> Adviser: Dr. Goran Konjevod	Summer 2019
Biologically Inspired Neural and Dynamical Systems Lab <i>Hierarchical Network Structure and Dynamics Motivated by Brains</i> Adviser: Professor Robert Kozma	Spring 2017 - Summer 2018
University of Massachusetts Amherst <i>Recurrent Systems for EMG-Based Hand Gesture Recognition</i> Adviser: Professor Qian-Yong Chen	Fall 2017 - Spring 2018
University of Massachusetts Amherst <i>Deep Neural Networks for Classifying Breast Masses From Mammograms</i> Adviser: Professor Nathaniel Whitaker	Fall 2016 - Spring 2017
Mathematical Sciences Research Institute <i>A Matroid Generalization of Sperner's Lemma</i> Advisers: Professors Francis Su and Mutiara Sondjaja	Summer 2015

PUBLICATIONS

G.P. Andrade, M. Ruzsinkó, and R. Kozma *Graph Models of Neurodynamics to Support Oscillatory Associative Memories*. In Proceedings of the International Joint Conference on Neural Networks (2018)

PROGRAMMING LANGUAGES & OPERATING SYSTEMS

Python, C, C++, Bash, Java, Matlab, x86 assembly, and PDDL

Multiple Linux Distributions, OS X, and Windows

RELEVANT WORK EXPERIENCE

Lawrence Livermore National Labs

- Complex Networks Researcher Summer 2019

University of Colorado Boulder Department of Computer Science

Teaching Assistant

- Intro to Computational Thinking Fall 2019
- Algorithms Spring 2019
- Starting Computing (Computer Science 1) Fall 2018

University of Massachusetts College of Information and Computer Sciences

- Research Assistant Summer 2017 - Summer 2018

University of Massachusetts Department of Mathematics and Statistics

- Graduate System Administrator and IT assistant Fall 2016 - Spring 2018

SERVICE & LEADERSHIP

Graduate Researchers in Data (GRiD)

Summer 2017 - Spring 2018

Chair of Operations

- Organized and Hosted workshops, talks, and Hackathons
- Helped manage funds and secure assets for the organization

ASA DataFest

Spring 2017 & 2018

Consultant

- Advised participants needing help with their projects

UMass Provost Undergraduate Research Fellowship

Fall 2015 - Spring 2016

Mentor

- Helped guide the fellowship recipient in their research, class choices, etc.
- Chosen among senior undergraduates to represent the Mathematics Department

AWARDS & HONORS

2nd Place In Progress Research Poster, Graduate Student Research Expo Spring 2019

Outstanding Academic Achievement Award in Mathematics & Statistics Spring 2016

Louis Stokes Alliances for Minority Participation (LSAMP) Scholar

SELECT PRESENTATIONS

ACM Conference on Economics and Computation, Phoenix, AR	June 25th 2019
DARPA Site Visit, Amherst, MA	May 10th 2017
AMS/MAA Joint Mathematics Meeting (JMM), Seattle, WA	January 8th 2016
NSF SFS Site Visit, Amherst, MA	November 12th 2015
SACNAS National Conference, National Park, MD	October 29th 2015
MSRI-UP Final Talk, Berkeley, CA	July 24th 2015

RELEVANT GRADUATE LEVEL COURSEWORK

University of Colorado Boulder:

- Dynamics on Networks (APPM 5720)
- Biologically Inspired Multi-Agent Systems (CSCI 5423)
- Convex Optimization (CSCI 5254)
- Network Analysis and Modeling (CSCI 5352)
- Coordination and Control of Multi-Agent Systems (ECEN 5008)

University of Massachusetts Amherst:

- Information Theory (CS 650)
- Artificial Neural Network Dynamics Independent Study (CS 696)
- Artificial Intelligence (CS 683)
- Advanced Algorithms (CS 611)
- -Numerical Analysis (Math 651)
- Cybersecurity Lecture Series (Math 591CF)
- Mathematical Statistics I & II (Stats 607 & 608)
- Dynamics, ODEs & PDEs (Math 532H & 534H)
- Real Analysis (Math 523H)

MISC. SKILLS

Fluent in English and Portuguese