# Gabriel Passamani Andrade

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Education

University of Colorado Boulder

Ph.D. in Computer Science

GPA: TBD

University of Massachusetts Amherst

M.S. in Applied Mathematics

Emphasis on Applications in Computer Science

GPA: 3.710

University of Massachusetts Amherst

B.S. in Mathematics

Concentration in Pure Mathematics

Minor in Philosophy Graduated Cum Laude

GPA: 3.675

Research Experience

Biologically Inspired Neural and Dynamical Systems Lab

Hierarchical Network Structure and Dynamics Motivated by Brains

Adviser: Professor Robert Kozma

University of Massachusetts Amherst-Yearly MS Project

Recurrent Systems for EMG-based Hand Gesture Recognition

Adviser: Professor Qian-Yong Chen

University of Massachusetts Amherst-Yearly MS Project

Deep Neural Networks for Classifying Breast Masses From Mammograms

Adviser: Professor Nathaniel Whitaker

Mathematical Sciences Research Institute-Undergraduate Program

A Matroid Generalization of Sperner's Lemma

Advisers: Professor Francis Su & Dr. Mutiara Sondjaja

University of Massachusetts Amherst - REU

Numerical Methods for Computing Eigenvalues and Eigenvectors of Square Matrices

Adviser: Professor Nathaniel Whitaker

Fall 2018 - Spring 2022

Fall 2016 - Spring 2018

Fall 2012 - Spring 2016

Spring 2017 - Present

Fall 2017 - Spring 2018

Fall 2016 - Spring 2017

Summer 2015

Summer 2014

Spring 2016

Research Assistant Summer 2017 - Present

Biologically Inspired Neural & Dynamical Systems Lab at UMass Amherst

Graduate System Administrator and IT assistant Fall 2016 - Present

University of Massachusetts Department of Mathematics and Statistics

Peer Undergraduate Adviser Fall 2015

University of Massachusetts Department of Mathematics and Statistics

Teaching Assistant - Calculus I & II for Life and Social Sciences Fall 2014

University of Massachusetts Department of Mathematics and Statistics

### Programming Languages & Operating Systems

Python, C, Bash, Java, Matlab, HTML, x86 assembly, and PDDL Multiple Linux Distributions, OS X, and Windows

### Service and Leadership

Graduate Researchers in Data (GRiD) Summer 2017 - Spring 2018

Co-Chair of Operations

-Organize and Host workshops, talks, and Hackathons

-Help manage funds and secure assets for the organization

University of Massachusetts 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

University of Massachusetts Outing Club Spring 2013 - Spring 2016

Hiking Leader

-Organized and led hikes throughout New England

-Received multiple certifications related to wilderness survival and first aide

#### Awards, Honors, Grants

Outstanding Academic Achievement Award in Mathematics & Statistics

Dean's List Six Semesters

Louis Stokes Alliances for Minority Participation (LSAMP) Scholar

#### **Select Presentations**

DARPA Site Visit, Amherst, MA

AMS/MAA Joint Mathematics Meeting (JMM), Seattle, WA

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

REU Mini-Conference, New Haven, CT

July 25th 2014

### Relevant Graduate Level Coursework

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