Gabriel Passamani Andrade

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Education

University of Massachusetts Amherst	Fall 2016 - Spring 2018

Master of Science in Applied Mathematics
Emphasis on Applications in Computer Science

GPA : 3.678

University of Massachusetts Amherst	Fall 2012 - Spring 2016

Bachelor of Science in Mathematics
Concentration in Pure Mathematics
Minor in Philosophy
Graduated Cum Laude

GPA : 3.675

Research Experience

University of Massachusetts Amherst-Yearly MS Project	Fall 2017 - Present

Recurrent Systems for EMG-based Hand Gesture Recognition

Adviser: Professor Qian-Yong Chen

Biologically Inspired Neural and Dynamical Systems Lab	Spring 2017 - Present

Hierarchical Network Structure and Dynamics Motivated by Brains

Adviser: Professor Robert Kozma

University of Massachusetts Amherst-Yearly MS Project	Fall 2016 - Spring 2017

Deep Neural Networks for Classifying Breast Masses From Mammograms

Adviser: Professor Nathaniel Whitaker

Mathematical Sciences Research Institute-Undergraduate Program	Summer 2015

A Matroid Generalization of Sperner's Lemma

Advisers: Professor Francis Su & Dr. Mutiara Sondjaja

University of Massachusetts Amherst - REU	Summer 2014

Numerical Methods for Computing Eigenvalues and Eigenvectors of Square Matrices

Adviser: Professor Nathaniel Whitaker

LSAMP COSEE-TEK Research Project	Spring 2014

Thermo-Photo-Saline Sensor Buoy Design and Construction

Relevant Work Experience

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 - Present
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   Spring 2016

Dean's List Six Semesters

Louis Stokes Alliances for Minority Participation (LSAMP) Scholar

Select Presentations

DARPA Site Visit, Amherst, MA   May 10th 2016
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
REU Mini-Conference, New Haven, CT   July 25th 2014

Relevant Graduate Level Coursework

Information Theory (CS 650); Formal Language Theory (CS 501);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