MARCOS
ORTIZ, PHD

CONTACT INFO

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LinkedIn linkedin.com/in/passthemath

ABOUT ME

I am a researcher, scientist, mathematician, teacher, and student. I love to explore technical questions and puzzles, and learn about new technology and tools that can be applied to solving problems.

My academic and professional adventures, so far, have taught me a lot about myself, my strengths, and the kind of work that I find most rewarding.

Some of my strengths:

- I am a fast learner, especially when it comes to technical tools and concepts
- I pay attention to details, even when the machinery involved is very complicated
- When I get stuck, I am able to be flexible in my thinking and approach, and find a new way to attack the problem
- I am a good communicator, both in expressing my own ideas and in listening to the ideas of my collaborators

Work that I find rewarding:

- Projects where I have the opportunity to collaborate with others, to learn together and work towards common goals
- Developing or improving products that have a positive impact on entire communities
- Challenging problems that involve tools and ideas from different disciplines

I have recently become particularly interested in developments in machine learning, and data science. I am working to develop my skills with these tools to explore new problems and opportunities.

EDUCATION

PhD in MATHEMATICS 2009-2015

University of Iowa | *Iowa City, IA*

- Research Areas: Topology, Contact Structures
- Thesis topic: "Convex Decomposition Techniques Applied to Handlebodies"

REU in MATHEMATICS 2008

The Mathematical Sciences Research Institute | *Berkeley, CA*

- Research topic: "Experimental Mathematics"

BSc in MATHEMATICS 2005-2009

The State University of New York at Buffalo | *Buffalo, NY*

- Graduated Summa Cum Laude
- Honors thesis topic: Classification of Surfaces

BA in PSYCHOLOGY 2001-2004

University of North Carolina at Wilmington | *Wilmington, NC*

- Main areas of interest: Experimental Psychology and Behavior

CERTIFICATES

UNSUPERVISED LEARNING, RECOMMENDERS, REINFORCEMENT LEARNING July 2023

Coursera | *DeepLearning.AI & Stanford University*

ADVANCED LEARNING ALGORITHMS June 2023

Coursera | *DeepLearning.AI & Stanford University*

SUPERVISED MACHINE LEARNING: REGRESSION AND CLASSIFICATION May 2023

Coursera | *DeepLearning.AI & Stanford University*

EMPLOYMENT

INSTRUCTOR 2018 - Current

Colorado Mesa University | *Grand Junction, CO*

- Courses and subjects taught at all levels, including: Calculus I and II, Multivariable Calculus, Linear Algebra, Discrete Mathematics, Differential Equations, Topology
- Mentored research projects in: Topology

VISITING ASSISTANT PROFESSOR 2015-2018

Grinnell College | *Grinnell, IA*

- Courses and subjects taught at all levels, including: Calculus, Linear Algebra, Abstract Algebra, Topology
- Mentored research projects in: Topology, Topological Data Analysis

SKILLS

●●● Technical Writing, Research, LaTeX, Mathematics, Topology, Teaching, Public Speaking, Technical Problem Solving, Experimental Mathematics, Linear Algebra

●●○ Python, Object Oriented Programming, Discrete Structures and Algorithms, Topological Data Analysis

●○○ TensorFlow, Keras, Numpy, SciPy, Jupyter, MATLAB, Mathematica, Java, C++, HTML

Interests and Developing Artificial Intelligence (AI), Machine Learning (ML), Data Science and associated tools (Scikit-learn, PyTorch, Pandas, SQL, etc.), Lisp, Functional Programming, and additional programming languages (R, Julia, and Swift, etc.)