Marcos Ortiz
970-312-6561 | mortiz@coloradomesa.edu | Grand Junction, Colorado, 81504
Web: marcoswastaken.com GitHub: marcoswastaken LinkedIn: marcoswastaken

PROFESSIONAL SUMMARY

I am a data scientist with a PhD in Mathematics, with more than 15 years of experience solving complex problems and communicating results. I am familiar with the fundamentals of neural networks and deep learning, including using real world data to build models and generate actionable insights and results.

CERTIFICATIONS AND PROJECTS

Deep Learning Boot Camp for PhDs, The Erdos Institute, 2024

- Chosen as a Top Project by the course coordinator
- Implemented advanced retrieval augmented generation (RAG) techniques
- Improved the relevance of retrieved documents across a variety of metrics, while managing sub-second retrieval times on a massive unstructured text dataset

Data Science Boot Camp for PhDs, The Erdos Institute, 2023

- Recognized as the 1st Place Project by a panel of experts across a variety of disciplines
- Collected and processed real world weather, surface water, and groundwater data
- Built a recurrent neural network model that can make accurate predictions of groundwater levels well outside (several years) beyond the training data

Deeplearning.AI and Stanford University Certificate, Coursera, 2023

- Machine Leaning Specialization: Unsupervised Learning, Advanced Learning Algorithms, Supervised Machine Learning

WORK EXPERIENCE

Assistant Professor of Mathematics, Colorado Mesa University, 2018 - Present

- Partnered with Institutional Research to use incoming student data and past student performance to improve student placement in first math courses
- Earned an overall score of 95% on student evaluations across all courses taught
- Awarded the highest possible faculty performance rating, Exceptional, for the past 5 years in a row.

Visiting Assistant Professor of Mathematics, Grinnell College, 2015-2018

- Mentored advanced undergraduate summer research projects in topology and topological data analysis.
- Developed lectures, homework, exams, and student projects for Linear Algebra, Number Theory, Topology, and Abstract Algebra.

SKILLS

- Mathematics: Research, Low Dimensional Topology, Experimental Mathematics, Topological Data Analysis, Linear Algebra, Abstract Algebra, Analysis, Number Theory, Differential Equations, Vector Calculus
- Technical: python, C++, SQL, Excel, LaTeX, git
- Python Libraries: NumPy, Pandas, Polars, Matplotlib, Seaborn, TensorFlow, Keras, Scikit-learn, PyTorch, LanceDB

EDUCATION

PhD, Mathematics — ***June 2015***
University of Iowa
B.Sc., Mathematics — *June 2009*
State University of New York at Buffalo
B.A., Psychology — *June 2004*
University of North Carolina at Wilmington