

Mark Christopher Harris, PhD | Data Scientist
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As a data scientist and prior educator with a background in math and physics, I leverage my experience with rigorous reasoning, experimental planning, data analysis, and communication to thoroughly understand and explain problems. I adopt a big-picture point of view, grounded by years of experience applying math to the world, to anticipate key details and devise comprehensive problem-solving strategies.

TECHNICAL SKILLS

Programming: SQL, Python, PySpark, Git, GitHub

Data Tools: Pandas, Numpy, Scikit-learn, Tensorflow, Keras, Matplotlib, Seaborn, BeautifulSoup, Streamlit

Machine Learning Methods: Regression, Classification, Clustering, Time Series Analysis, Neural Networks

Data Science Applications: Computer Vision, Natural Language Processing (NLP), Data Visualization

EXPERIENCE

Data Science Instructor Associate - Contractor

Remote

General Assembly

6/2022 - present

- Assisted instruction of courses covering Python and Data Analysis using Pandas, SQL, and Tableau.
- Communicated with students about their needs and provided feedback on assignments.

Data Science Immersive Program

Remote

General Assembly

9/2021 - 12/2021

- Learned and applied data science and machine learning skills in a 480-hour immersive program, completing 6 projects, 21 lab assignments, and 6 quizzes.
- Completed data science projects include, but are not limited to:
 - **Snow Vision Capstone Project:** Trained a convolutional neural nets to classify images with falling snow added via a mask to 99.5% accuracy.
 - **Food Deserts Group Project:** Collaborated with two other data scientists using Git to analyze food deserts and health with interpretable regression and classification models and geographical data.
 - **Reddit NLP Project:** Classified posts acquired via API as being from either the science or futurology subreddits using NLP and multiple classification models, achieving 83.5% accuracy.

Mathematics Teacher

Dunwoody, GA

Dunwoody High School

7/2016 - 5/2021

- Taught high school math classes from Algebra to Multivariable Calculus and sponsored the Math Team.
- Planned syllabus and lessons as sole teacher for AP Calculus BC and Multivariable Calculus courses, identifying key concepts, breaking them into their essential parts, and highlighting connected ideas.
- Collaborated with colleagues to develop lessons and common assessments to identify student needs.
- Managed classes of up to 36 diverse students, approximately 150-180 students per year, establishing class structure, identifying student needs, providing feedback, and communicating with parents.
- Organized and supervised student groups of up to 12 on trips to weekend math competitions.

Graduate Research and Teaching Assistant

Ithaca, NY

Cornell University

8/2004 - 8/2014

- Published a novel experiment combining multiple computers and scientific methods.
- Programmed Python script to automate portions of experiment for accuracy and reproducibility.
- Categorized novel events in over 5 GB data and analyzed their properties with the aid of IGOR Pro scripts.
- Applied statistical analysis to identify a characteristic behavior dependent on experimental conditions.

EDUCATION

Data Science Immersive, General Assembly, Remote

9/2021 - 12/2021

Ph.D. Applied Physics, Cornell University, Ithaca, NY

8/2004 - 8/2014

B.S. Physics and B.S. Applied Math, North Carolina State University, Raleigh, NC

8/2000 - 5/2004