INTRODUCING MACHINE LEARNING IN PYTHON

WITH SCIKIT-LEARN

with Corey Wade, Director & Founder of Berkeley Coding Academy

LEAD INSTRUCTOR

Corey Wade

- Director & Founder of Berkeley Coding Academy
- Author of 2 Python Machine Learning Books
  - Hands-on Gradient Boosting with XGBoost and scikit-learn
  - The Python Workshop - includes Machine Learning & Deep Learning
- Math/Programming Teacher at Berkeley Independent Study

SUPPORT STAFF

Ishika Prashar

- Berkeley Coding Academy lead instructor
- UC Berkeley Graduate Data Science instructor
- Degrees in Data Science and Cognitive Science

OUTLINE

- Introduction - 10 min slides + 5 min code set-up
- Module 1 - Preparing Data for ML - 20 min code
- Module 2 - Building First ML Model - 10 min slides + 25 min code
- Module 3 - Find Best Model via Cross-validation - 15 min code + 10 min slides + 10 lab/contest + 10 min break
- Module 4 - Optimize Models with Hyperparameters - 10 min slides + 20 min code + 15-20 min lab/contest
- Module 5 - Finalize models: feature_importances_ , Pipelines - 20-25 min
- Conclusion 10 min slides

SETUP

- Prerequisites - Python
- Requirements - Jupyter Notebook - (Open or Download via Anaconda)
    - Colab Notebooks (link below) also an option
- Code & Links - https://github.com/coreyjwade/ODSC_West_2023
    - Download: **starter_code_sklearn_intro**