

COSC-247 Machine Learning
Amherst College, Spring 2023
Lee Spector

Class 4

Today

- Notes and reminders
- NumPy
- Pandas
- Demonic coding?

Thursday, February 9

Before class:

- Read [NumPy: the absolute basics for beginners](#).
- Read just the "10 minutes to pandas" section of the [pandas User Guide](#).
- Read our textbook's Chapter 1: Giving Computers the Ability to Learn from Data
- Optional: Read "Introduction: Paradigms for Machine Learning" (in eReserves, above; when you get to the article's page, click "Access through your institution" near the top, type in "Amherst College," and click through to download the PDF)
- Optional: read the presentation slides for Pat Langley's 1996 "Tutorial on Machine Learning," linked below

In class:

- NumPy
- pandas
- Machine learning overview

After class:



- Take Quiz #1 on Friday



- Submit First Python assignment by Monday

Tuesday, February 14

Before class:

- Read *Python Machine Learning* Chapter 2: Training Simple Machine Learning Algorithms for Classification, but only the sections on "Artificial neurons: a brief glimpse into the early history of machine learning" and "Implementing a perceptron learning algorithm in Python."

In class:

- History of machine learning
- Perceptrons

After class:

- Submit RICE #1 report



RICE #1 Reports

- `numpy.ipynb`
- `pandas.ipynb`