

Week 2: NumPy

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Introduction to NumPy

- NumPy was created by Travis Oliphant in 2005, by merging Numarray into Numeric.
- What makes NumPy so popular to the scientific community is that it provides a convenient Python interface for working with multi-dimensional array data structures.
- The NumPy array data structure is also called `ndarray`, which is short for n-dimensional array.
- NumPy also makes it possible to do vectorized operations and broadcasting.

N-Dimensional Array

- Intuitively, we can think of a one-dimensional array as a vector.
- Similarly, we can think of a two-dimensional array as a matrix.
- While NumPy arrays can have up to 32 dimensions, we mainly use up to 3 dimensions.

2-Dimensional Array

