

NumPy Cheat Sheet - Core Functions

Core Array Functions

Function	What It Does (Easy Language)
<code>np.array()</code>	Creates an array from a list or lists
<code>arr.shape</code>	Tells the size of array in each direction
<code>arr.ndim</code>	Tells how many dimensions the array has
<code>arr.size</code>	Total number of elements in the array
<code>arr.dtype</code>	Tells the data type of elements
<code>np.zeros(shape)</code>	Creates an array filled with 0s
<code>np.ones(shape)</code>	Creates an array filled with 1s
<code>np.empty(shape)</code>	Creates array with random junk values
<code>np.eye(n)</code>	Creates an identity matrix
<code>np.arange(s, e, step)</code>	Like <code>range()</code> , makes array
<code>np.linspace(s, e, num)</code>	Evenly spaced numbers
<code>np.reshape(arr, shape)</code>	Changes shape of the array
<code>arr.flatten()</code>	Turns any array into 1D
<code>arr.T</code>	Transposes the array
<code>np.concatenate()</code>	Joins arrays together
<code>np.split(arr, n)</code>	Splits array into n parts
<code>np.mean(arr)</code>	Finds the average value
<code>np.sum(arr)</code>	Adds up all elements
<code>np.max(arr)</code>	Finds the biggest number
<code>np.min(arr)</code>	Finds the smallest number
<code>np.sort(arr)</code>	Sorts the array
<code>np.unique(arr)</code>	Finds all unique values
<code>np.random.rand(shape)</code>	Random numbers from 0 to 1

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<code>np.dot(a, b)</code>	Matrix multiplication (dot product)
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