self.image\_matrix\_flat = numpy, shape(shape\*shape, image\_count)

self.image\_matrix = list of tuples, first is shape\*shape, second empty, length image\_count

self.face\_weights = shape(image\_count, eigenfaces\_n)

self.eigenfaces = shape(eigenfaces\_n, shape, shape)

self.eigenfaces\_flat = shape(eigenfaces\_n, shape\*shape)

self.mean\_img = tuple, shape(86, 86)