Face Detection Recognition

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We are planning to add to our face identification programs so they can differentiate between faces and non-face photos. We plan to add a comparison into our code that checks if the face is in the face space.

We are planning to do this because we want to solidify our understanding by applying PCA to detect faces.

November 27-28 refresh our understanding by looking at the research paper

November 29 go to office hours to talk about the main ideas and get started on the code

November 30-December 3rd finish the code

December 4 make the poster

We want to code 4 outcomes

1. In the face space and close to a person
   1. Return the person it is identified as
2. In the face space not close to a person
   1. return face and add it as a new person
3. Not in face space, but Close to a face
   1. Return it and maybe a message that it is not a face
4. Not in face space and not close to a face
   1. Return it and maybe a message that it is not a face

Imresize to turn it into 36\*36

knnsearch to return the closest neighboring picture

TO DO:

Find outside images of

5 images of various gender/ethnicity people

5 images of animals

5 images of objects

<https://drive.google.com/drive/folders/1Oo8U5A0nlyfB1poIbV5QrJmqXdiR0Ucr?usp=sharing>