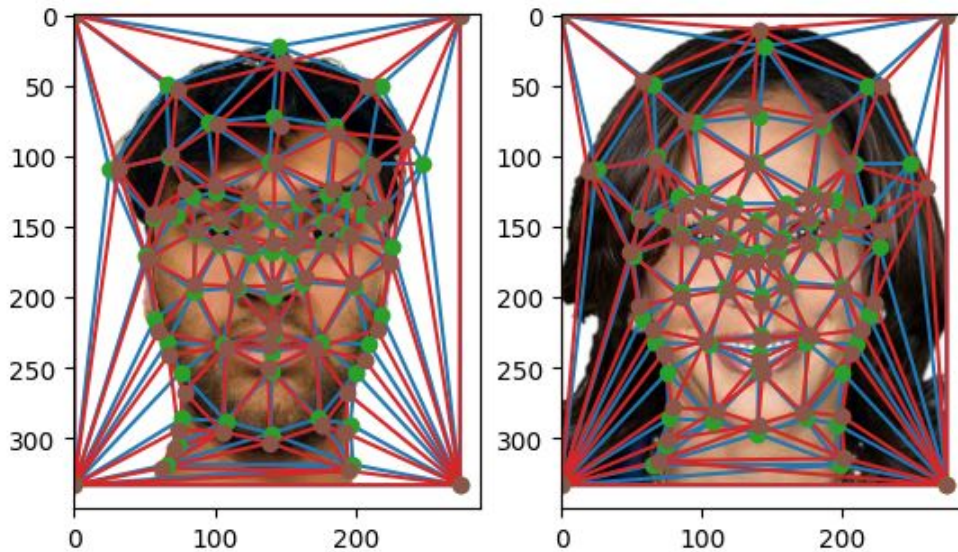


CS180 Project 3

Rishi Nath 2024

Part 1: Defining Correspondences

I used [this suggested online tool](#) to label correspondences.



Part 2. Computing the "Mid-way Face"

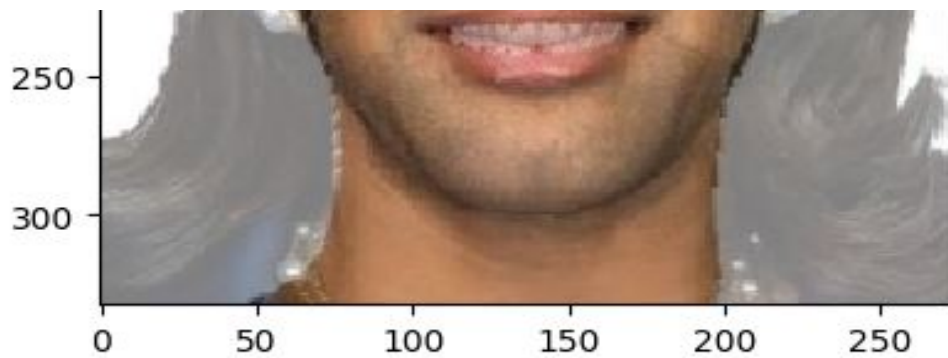
Original A and B faces:





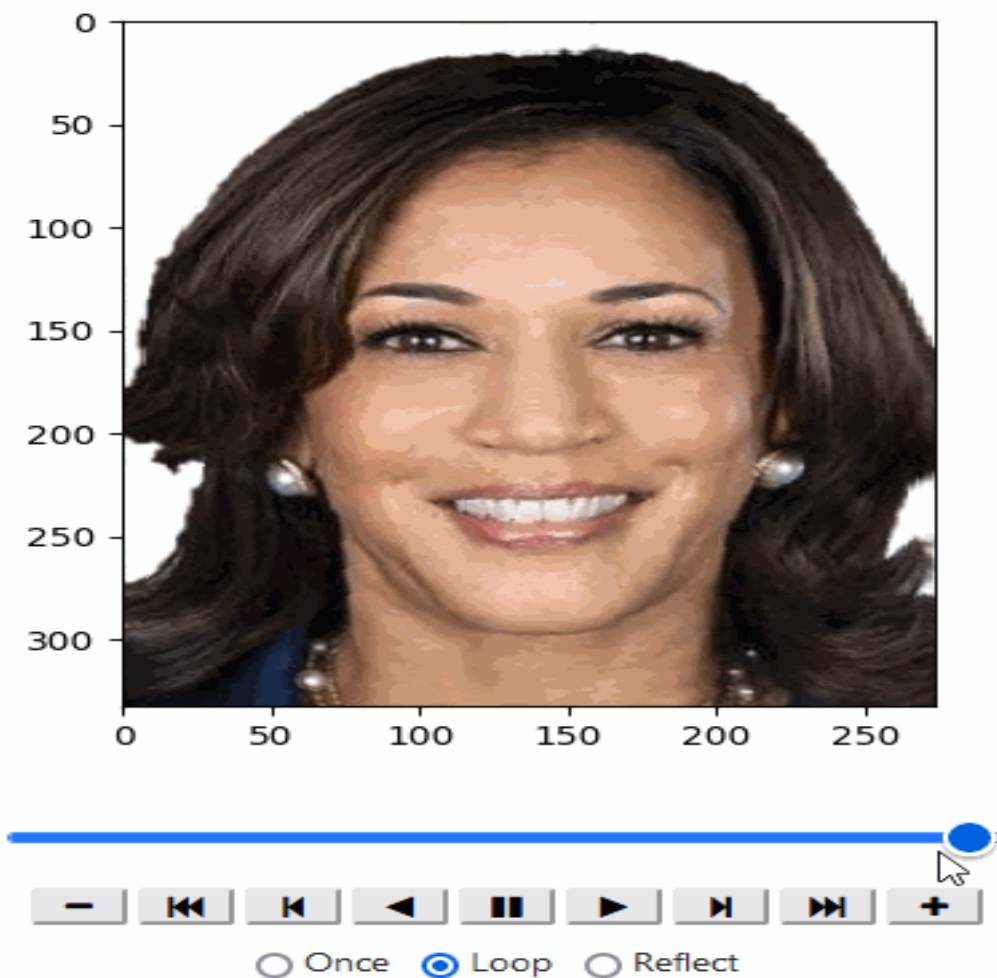
The "Mid-way Face":





Part 3. The Morph Sequence

The gif:



In the gif, I also show how the morph looks on variable speeds.

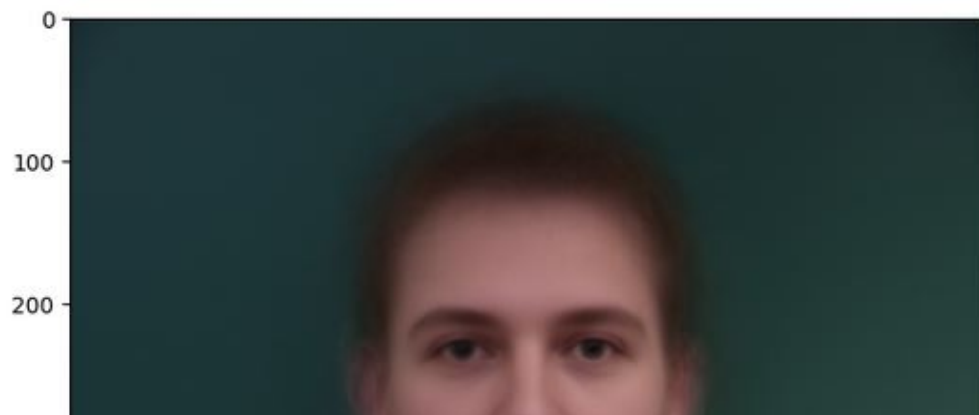
Part 4. The "Mean face" of a population

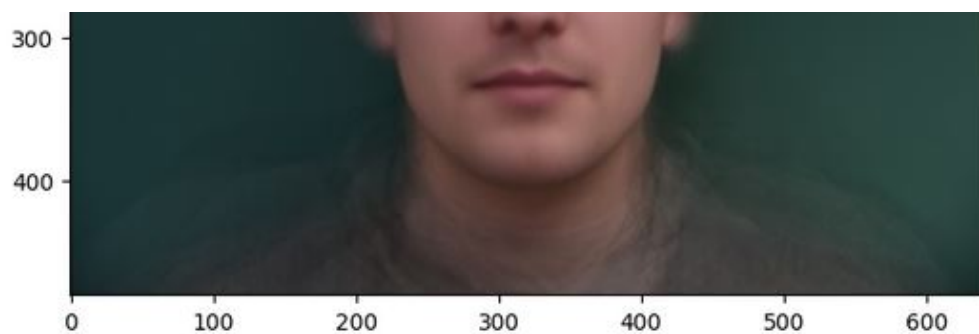
I calculated the average male face from the imm_face_db dataset. Here are some faces from that dataset warped into the average shape.



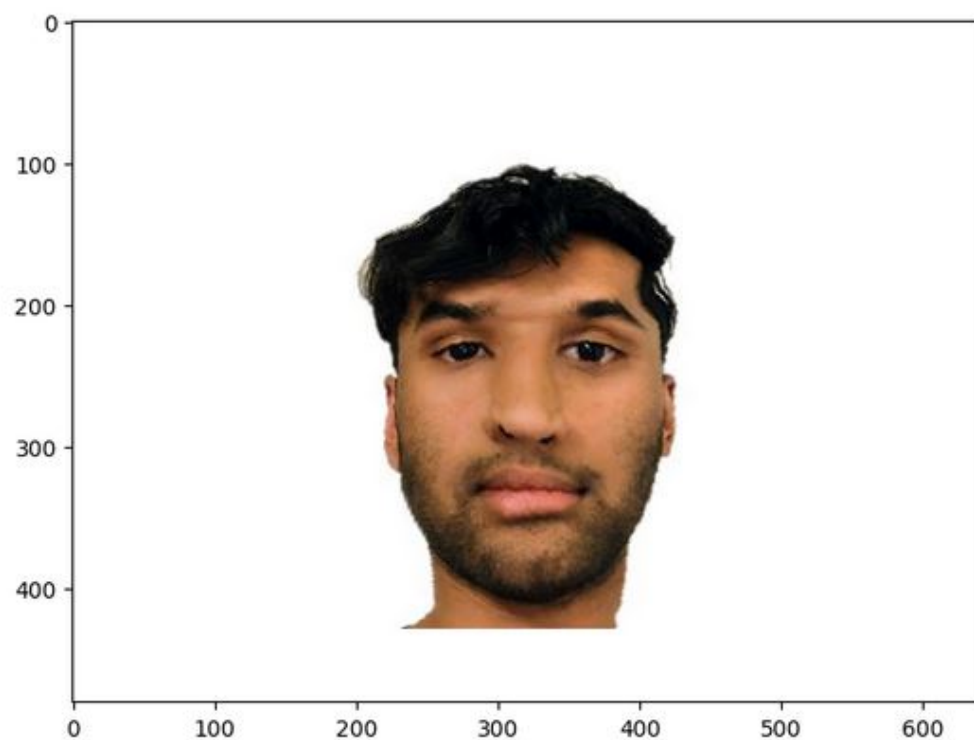


Here is the average face, warped into the average shape. (i.e. warp each face into the average male shape, and then average the pixels.)

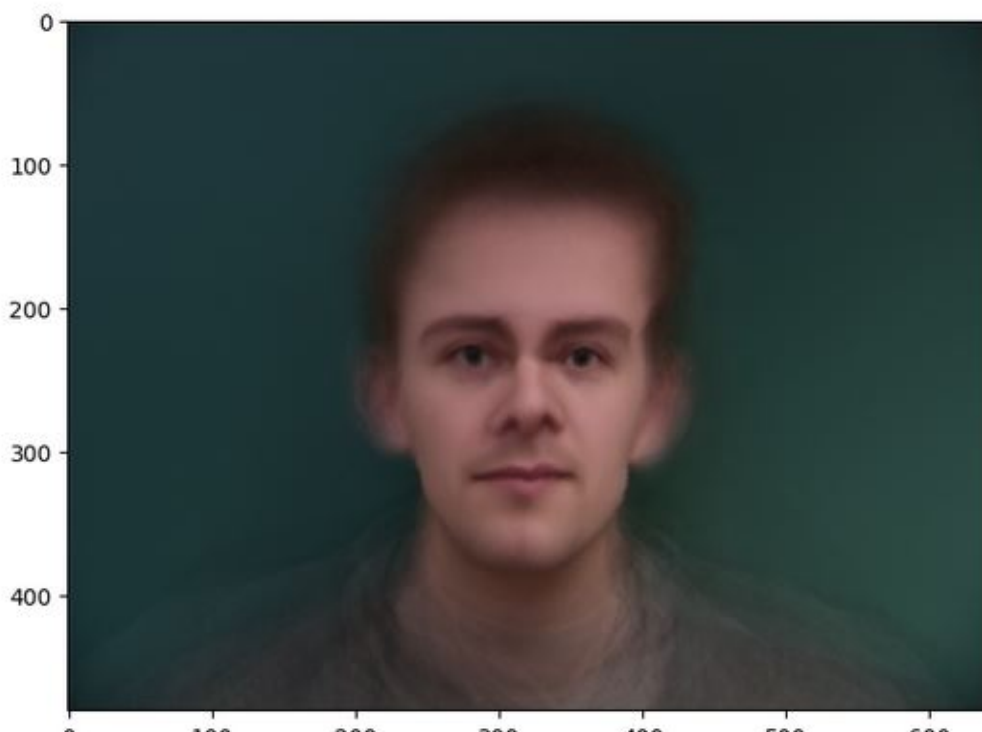




Here is my face warped into the average geometry.



And, here is the average face warped into my geometry.



0 100 200 300 400 500 600

Part 5. Caricatures: Extrapolating from the mean

I used the formula: $\alpha \cdot \{\text{Average Face warped to my geometry}\} + (1-\alpha) \cdot \{\text{My face}\}$. Below are results with $\alpha = 1.2, 1.5, 3,$ and 5 respectively.

