AMERICAN UNIVERSITY OF ARMENIA

*College of Science and Engineering*

**CS 260 Image Processing**

**PROJECT**

**PRELIMINARY DEADLINE**: Sunday, December 08 2019, before 09:00 am SHARP

**FINAL DEADLINE**: Tuesday, December 17 2019, before 09:00 am SHARP

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**Stage 3**

For stage 3 I wanted to do gender detection by investigation if neck. However, in the images, the neck is not clearly visible and the factor of gender indication is not present. After my failed experiment to do it, I decided to do ear investigation and get precise shape of the ears. However, many of my results were very similar and I did not continue that research.

I applied smothering technique3 from stage1 to image non-frontal images to obtain the contour of ears. Alongside, I got also the contour of lips and nostrils. The contour is not precise but rather a smooth one.

I tried to apply minimum (radius = 2) and then Gaussian blur (radius = 2) to the smooth3 image obtained in Stage1 and as a results got separated lips and more highlighted ears when using Layer\_3. For all other layers the results where smoother.

In fact, I would very like to continue of my gender detection idea. Unfortunately, there are no suitable images in the dataset for that. I tried my best to get at least something by the available images but did not manage to do that. But I still think that it could work.