

Supplementary Material for MVF-Net: Multi-View 3D Face Morphable Model Regression

1. Content

In this supplementary, we provide the following contents:

- visual results with neutral faces compared with state-of-the-art-methods.
- results on face video with different expressions compared with [3]. This is provided in a video file named **videodata.avi**.

2. Neutral Faces Results

We test our method on the FEI Face Database which is available on [1]. There are 14 images for each of 200 individuals, a total of 2800 images. Figures on pages 2, 3, 4 show the comparisons between the proposed methods and state-of-the-art methods. For our method, we showed the reconstructed facial geometry. For [4][3][2], we show the pooled facial geometry from three input images. The visual results demonstrate that our method outperforms the others on face images with distinct appearances.

3. Expressional Faces Results

We also provide results on a spontaneous video shot with three cameras in **videodata.avi**. We test the video data frame by frame without temporal smoothing. Compared with [3], our result shows the facial geometry with higher fidelity and more accurate expressions.

References

- [1] C. U. d. F. Department of Electrical Engineering. Fei face database, 2006. 1
- [2] K. Genova, F. Cole, A. Maschinot, A. Sarna, D. Vlastic, and W. T. Freeman. Unsupervised training for 3d morphable model regression. In *CVPR*, pages 8377–8386, 2018. 1
- [3] A. Tewari, M. Zollhöfer, H. Kim, P. Garrido, F. Bernard, P. Pérez, and C. Theobalt. Mofa: Model-based deep convolutional face autoencoder for unsupervised monocular reconstruction. In *ICCV*, volume 2, page 5, 2017. 1
- [4] A. T. Tran, T. Hassner, I. Masi, and G. Medioni. Regressing robust and discriminative 3d morphable models with a very deep neural network. In *CVPR*, pages 1493–1502. IEEE, 2017. 1

Input



Our



Tran17



MoFA



Genova18



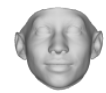
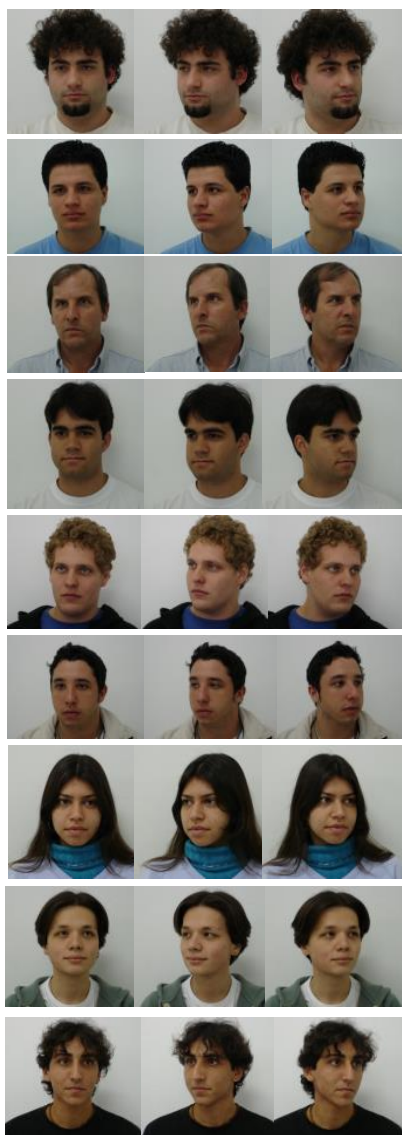
Input

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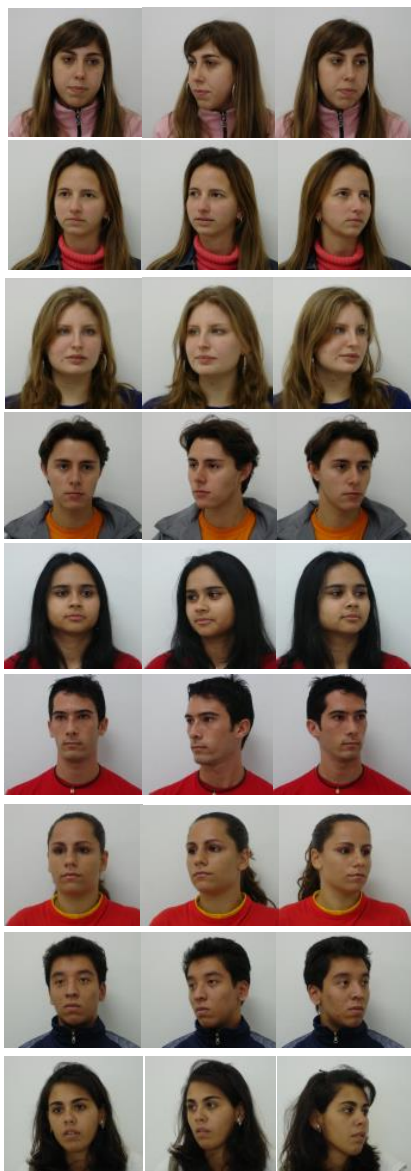
Input

Our

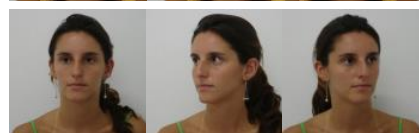
Tran17

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Our



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