











further experiments one might create more than the frontal view and use the mean of aesthetic values. In addition, the influence of different kind of noise would be interesting.

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## References

- [1] *Agisoft Photoscan Professional v1.3.2 build 4205 (64bit)*, <http://www.agisoft.com/>, accessed 2017.
- [2] *ReconstructMe v2.5.1034 (64bit)*, <http://reconstructme.net/>, accessed 2017.
- [3] R. Hartley and A. Zisserman. "Multiple View Geometry in Computer Vision", (2nd Ed.). Cambridge University Press, New York, NY, USA. 2003.
- [4] N. Snavely, S.M. Seitz, and R. Szeliski. "Photo Tourism: Exploring Photo Collections in 3D". In Proceedings of SIGGRAPH Conf., 2006.
- [5] D.G. Lowe. "Object Recognition from Local Scale-Invariant Features.", In Proceedings of the International Conference on Computer Vision (ICCV). Vol 2, pages 1150-1157, 1999.
- [6] M.A. Fischler and R.C. Bolles. "Random sample consensus: a paradigm for model fitting with applications to image analysis and automated cartography.", *Comm. ACM* 24, 6, pages 381-395, June 1981, DOI:<http://dx.doi.org/10.1145/358669.358692>
- [7] P. Labatut, J.-P. Pons, and R. Keriven. "Efficient multi-view reconstruction of large-scale scenes using interest points, Delaunay triangulation and graph cuts.", In Conference on Computer Vision and Pattern Recognition (CVPR), pages 1-8, June 2007.
- [8] J. Heller, M. Havlena, M. Jancosek, A. Torii, and T. Pajdla. "3D Reconstruction from Photographs by CMP SfM Web Service", In *IAPR International Conference on Machine Vision Applications (MVA)*, pages 30-34, 2015.
- [9] Capturing Reality s.r.o. Reality Capture, <https://www.capturingreality.com/>, accessed 2017.
- [10] S. Izadi, D. Kim, O. Hilliges, D. Molyneaux, R. Newcombe, P. Kohli, J. Shotton, S. Hodges, D. Freeman, A. Davison, and A. Fitzgibbon. "KinectFusion: real-time 3D reconstruction and interaction using a moving depth camera.", In Proceedings of the 24th annual ACM symposium on User interface software and technology (UIST '11). ACM, New York, NY, USA, pages 559-568, 2011. DOI: <https://doi.org/10.1145/2047196.2047270>
- [11] G. Gusev. "3D Self-Portraits. *ACM Transactions on Graphics.*", Proceedings of the 6th ACM SIGGRAPH Conference and Exhibition in Asia 2013, 11/2013
- [12] C. Heindl, S.C. Akkaladevi, and H. Bauer. "Capturing Photorealistic and Printable 3D Models Using Low-Cost Hardware.", Springer International Publishing, Cham, 2016, pages 507-518.
- [13] G. Stübl, C. Heindl, H. Bauer, and A. Pichler. „On Quality Assurance of 3D Bust Reconstructions.", Proceedings of the 2nd OAGM-ARW Joint Workshop Vision, Automation and Robotics, 2017
- [14] Y. Niu and F. Liu, "What Makes a Professional Video? A Computational Aesthetics Approach," in *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 22, no. 7, pp. 1037-1049, July 2012. DOI: 10.1109/TCSVT.2012.2189689
- [15] H.-H. Su, T.-W. Chen, C.-C. Kao, W.H. Hsu, and S.-Yi Chien. "Scenic photo quality assessment with bag of aesthetics-preserving features". In *Proceedings of the 19th ACM international conference on Multimedia (MM '11)*. Pages 1213-1216. 2011. DOI: <http://dx.doi.org/10.1145/2072298.2071977>
- [16] A. Krizhevsky, I. Sutskever und G. E. Hinton, „Imagenet classification with deep convolutional neural networks,“ in *Advances in neural information processing systems*, 2012.
- [17] H. Li, E. Vouga, A. Gudym, J.T. Barron, L. Luo, and X. Jin, J. Chi, S. Peng, Y.Tian, C. Ye, and X. Li, "Deep Image Aesthetics Classification using Inception Modules and Fine-tuning Connected Layer", in Proc. of 8th Int. Conf. on Wireless Communications and Signal Processing (WCSP), Yangzhou, China, 13-15 October, 2016. <https://arxiv.org/abs/1610.02256/>
- [18] T. Jost and H. Hügli. 2002. Fast ICP Algorithms for Shape Registration. In *Proceedings of the 24th DAGM Symposium on Pattern Recognition*, Luc J. Van Gool (Ed.). Springer-Verlag, London, UK, UK, 91-99.