Zhiwen Shao

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Personal

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Education

| Sept. 2015 - Present | Ph.D. candidate in Department of Computer Science and Engineering, |
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| | Shanghai Jiao Tong University (SJTU), Shanghai, P. R. of China. |
| Sept. 2011 - Jun. 2015 | B.Eng. degree from the School of Computer Science, |
| | Northwestern Polytechnical University (NPU), Xi'an, P. R. of China. |

Research Interests

Image Analysis

Facial Action Unit Recognition, Face Alignment, Face Recognition, Saliency Detection, Image Matching.

Deep Learning

• Generative Adversarial Network, Convolutional Neural Network.

Publications

- **Z. Shao**, H. Zhu, X. Tan, Y. Hao, and L. Ma, "Deep multi-center learning for face alignment," Neurocomputing, 2019. (SCI Q2)
- **Z. Shao**, Z. Liu, J. Cai, and L. Ma, "Deep adaptive attention for joint facial action unit detection and face alignment," in *European Conference on Computer Vision (ECCV)*. Springer, 2018, pp. 725-740. (**Top CV Conference**)
- **Z. Shao**, H. Zhu, Y. Hao, M. Wang, and L. Ma, "Learning a multi-center convolutional network for unconstrained face alignment," in *IEEE International Conference on Multimedia and Expo (ICME)*. IEEE, 2017, pp. 109-114. (**CCF B, oral**)
- **Z. Shao**, S. Ding, Y. Zhao, Q. Zhang, and L. Ma, "Learning deep representation from coarse to fine for face alignment," in *IEEE International Conference on Multimedia and Expo (ICME)*. IEEE, 2016, pp. 1-6. **(CCF B)**
- **Z. Shao**, S. Ding, H. Zhu, C. Wang, and L. Ma, "Face alignment by deep convolutional network with adaptive learning rate," in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, 2016, pp. 1283-1287. (CCF B, oral)
- Y. Hao, H. Zhu, **Z. Shao**, and L. Ma, "Feedback cascade regression model for face alignment," *IET Computer Vision*, 2019. (**CCF C, SCI**)
- H. Zhu, X. Tan, **Z. Shao**, Y. Hao, and L. Ma, "Multi-path feature fusion network for saliency detection," in *IEEE International Conference on Multimedia and Expo (ICME)*. IEEE, 2018, pp. 1-6. **(CCF B)**
- X. Tan, H. Zhu, **Z. Shao**, X. Hou, Y. Hao, and L. Ma, "Saliency detection by deep network with boundary refinement and global context," in *IEEE International Conference on Multimedia and Expo (ICME)*. IEEE, 2018, pp. 1-6. **(CCF B)**
- Y. Hao, H. Zhu, **Z. Shao**, X. Tan, and L. Ma, "Facial landmark detection under large pose," in *International Conference on Neural Information Processing (ICONIP)*. IEEE, 2018, pp. 684-696. (CCF C, oral)

- H. Zhu, B. Sheng, **Z. Shao**, Y. Hao, X. Hou, and L. Ma, "Better initialization for regression-based face alignment," *Computers & Graphics*, vol. 70, pp. 261-269, 2018. (CCF C, SCI)
- H. Zhu, **Z. Shao**, Y. Hao, and L. Ma, "Better face alignment via better initialization," in *IEEE International Conference on Computer-Aided Design and Computer Graphics (CAD/Graphics)*. IEEE, 2017.
- K. Tang, X. Hou, **Z. Shao**, and L. Ma, "Deep feature selection and projection for cross-age face retrieval," in *International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI)*. IEEE, 2017, pp. 1-7.
- Y. Zhao, Y. Li, **Z. Shao**, and H. Lu, "LSOD: Local sparse orthogonal descriptor for image matching," in *ACM International Conference on Multimedia (MM)*. ACM, 2016, pp. 232-236. (CCF A, short)

Selected Honors

| Scholarships | | |
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| Leo KoGuan Scholarship | | |
| Leo KoGuan Scholarship Leo KoGuan Scholarship | 2017 2016 | |
| • First Class Scholarship | 2013-2014 | |
| National Endeavor Scholarship | 2012-2013 | |
| Samsung Scholarship | 2012-2013 | |
| • First Class Scholarship | 2012-2013 | |
| National Endeavor Scholarship | 2011-2012 | |
| Wu Yajun Scholarship | 2011-2012 | |
| • First Class Scholarship | 2011-2012 | |
| Awards | | |
| Mathematical Contest In Modeling, Honorable Mention | 2014 | |
| China Undergraduate Electronic Mathematical Contest In Modeling, Second Prize | | |
| China Undergraduate Mathematical Contest in Modeling, Shaanxi Province, First Prize 2013 | | |
| Mathematical Contest of Shaanxi Province of China, Second Prize | 2012 | |
| NPU, Outstanding Graduate | | |
| C Programming Contest of NPU, Second Prize | | |
| Mathematical Contest In Modeling of NPU, First Prize | | |
| C Programming Contest of NPU, Second Prize | | |
| Smartcar Contest of NPU, Third Prize | | |
| Mathematical Contest In Modeling of NPU, First Prize | 2012 | |
| Photoshop Design Contest of NPU, Second Prize | 2012 | |
| Photoshop Design Contest of NPU, Honorable Mention | 2011 | |
| Sunshine Project, Outstanding Volunteer | 2011 | |
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Professional Skills

- English: CET-4 567, CET-6 489, TOEFL 81.
- Academic Record: Undergraduate 87.18 (Top 3.40%), Graduate 2.625 (3.3 GPA Scale).
- **Programming**: Python, Matlab, C++.
- **Deep Learning Framework**: PyTorch, Caffe.
- Invited Reviewer: ACM International Conference on Multimedia (MM) 2018, IEEE Transaction on Multimedia (TMM), Journal of Electronic Imaging

Experiences

| Nov. 2017 - Nov. 2018 | Research Assistant | Nanyang Technological University |
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| Mar. 2015 - Sept. 2016 | Intern (Joint Project of Tencent and SJTU) | Tencent Youtu Lab |
| Sept. 2011 - Jan. 2012 | Volunteer | Sunshine Project of NPU |