

HONGYU YANG

Gender: Female

Nationality: Chinese

Position: Ph.D., Associate Professor

Affiliation: School of Artificial Intelligence, Beihang University

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Work Experience:

2021.10~Present, Associate Professor, School of Artificial Intelligence, Beihang University, Beijing, China.

2019.06~2021.10, Post doctor, School of Computer Science and Engineering, Beihang University, Beijing, China.

Education Background:

09/2013~06/2019 Beihang University, Beijing, China

School of Computer Science and Engineering, Major: Computer Application Technology, Ph.D. Degree.

09/2009~06/2013 Beihang University, Beijing, China

School of Computer Science and Engineering, Major: Computer Science and Engineering, Bachelor Degree.

Research Interests:

Artificial Intelligence: Computer Vision, Image/Video Synthesis, Pattern Recognition.

Grants:

Principal Investigator:

- Cross-Scene Data Augmentation and Model Reasoning, **the National Key R&D Program of China**, 2023-2025.
- Dynamic Face Synthesis based on Implicit Neural Representations, **NSFC**, 2023-2025.
- Research on Human Gait Video Synthesis Towards Public Safety Scenes, **Beijing-NSF**, 2022-2024.
- Complex Semantic Image Synthesis and Editing, **The Youth Talent Support Program of the China Association for Science and Technology (CAST)**, 2020-2022.
- Research on Multi-Objective Image Synthesis, **CCF-Baidu Pinecone Fund Project**, 2020-2021.

Selected Publications:

Journal:

- **H. Yang**, D. Huang, Y. Wang, A. K. Jain: Learning Continuous Face Age Progression: A Pyramid of GANs, IEEE Transactions on Pattern Analysis and Machine Intelligence (IEEE-TPAMI), 43(2): 499-515, 2021.
- **H. Yang**, D. Huang, Y. Wang, H. Wang, Y. Tang: Face Aging Effect Simulation using Hidden Factor Analysis Joint Sparse Re- presentation, IEEE Transactions on Image Processing (IEEE-TIP), 25(6): 2493-2507, 2016.
- Y. Li, Y. Zhang, **H. Yang***, B. Chen, D. Huang: SA³WT: Adaptive Wavelet-Based Transformer with Self-Paced Auto Augmentation for Face Forgery Detection. International Journal of Computer Vision (IJCV), 1-23, 2024.
- **H. Yang**, K. Zhu, D. Huang, H. Li, Y. Wang, L. Chen: Intensity enhancement via GAN for multimodal face expression recognition. Neurocomputing, 454: 124-134, 2021.

Conference:

- X. Guo, J. Liu, M. Cui, J. Li, **H. Yang**, D. Huang: Initno: Boosting text-to-image diffusion models via initial noise optimization. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024. (CCF-A)
- H. Li, **H. Yang**, D. Huang: DrFER: Learning Disentangled Representations for 3D Facial Expression Recognition. IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2024. (Oral, best student paper nomination, corresponding author)
- G. Li, **H. Yang**, D. Huang. Y. Wang: 3D Face Modeling via Weakly-supervised Disentanglement Network joint Identity-consistency Prior. IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2024. (Corresponding author)
- W. Xiang, **H. Yang**, D. Huang, Y. Wang: Denoising Diffusion Autoencoders are Unified Self-supervised Learners, IEEE International Conference on Computer Vision (ICCV), 2023. (Oral, CCF-A, corresponding author)
- K. Li, **H. Yang**, B. Chen, P. Li, B. Wang, D. Huang: Learning Polysemantic Spoof Trace: A Multi-Modal Disentanglement Net- work for Face Anti-spoofing, AAAI Conference on Artificial Intelligence (AAAI), 2023. (CCF-

- A, Corresponding author)
- M. Zheng, H. Zhang, **H. Yang**, D. Huang: NeuFace: Realistic 3D Neural Face Rendering from Multi-view Images, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023. (CCF-A)
 - W. Xiang, **H. Yang**, D. Huang, Y. Wang: Multi-view Gait Video Synthesis, ACM Multimedia Conference (MM), 2022. (CCF-A, corresponding author)
 - M. Zheng, **H. Yang**, D. Huang, L. Chen: ImFace: A Nonlinear 3D Morphable Face Model with Implicit Neural Representations, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022. (CCF-A)
 - B. Lei, X. Guo, **H. Yang**, M. Cui, X. Xie, D. Huang: ABPN: Adaptive Blend Pyramid Network for Real-Time Local Retouching of Ultra High-Resolution Photo, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022. (CCF-A)
 - H. Ma, **H. Yang**, D. Huang: Boundary Guided Context Aggregation for Semantic Segmentation, British Machine Vision Conference (BMVC), 2021. (Corresponding author)
 - X. Guo, **H. Yang**, D. Huang: Image Inpainting via Conditional Texture and Structure Dual Generation, IEEE International Conference on Computer Vision (ICCV), 2021. (CCF-A, corresponding author)
 - K. Zhu, **Y. Wang**, H. Yang, D. Huang, L. Chen: Intensity enhancement via GAN for multimodal facial expression recognition. IEEE International Conference on Image Processing (ICIP), 2020. (Corresponding author)
 - S. Chen, W. Li, **H. Yang**, D. Huang, Y. Wang: 3D Face Mask Anti-spoofing via Deep Fusion of Dynamic Texture and Shape Clues, IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2020.
 - M. Jia, **H. Yang**, D. Huang, Y. Wang: Attacking Gait Recognition Systems via Silhouette Guided GANs, ACM Multimedia Conference (MM), 2019 (**Oral**, CCF-A).
 - **H. Yang**, D. Huang, Y. Wang, A. K. Jain: Learning Face Age Progression: A Pyramid Architecture of GANs, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018. (**Oral**, CCF-A).
 - X. Ma, **H. Yang**, Q. Chen, D. Huang, Y. Wang: DepAudioNet: An Efficient Deep Model for Audio based Depression Classification, ACM International Conference on Multimedia (MM) Workshop: Audio/Visual Emotion Challenge (AVEC), 2016.
 - **H. Yang**, D. Huang, Y. Wang: Age invariant face recognition based on texture embedded discriminative graph model. IEEE International Joint Conference on Biometrics (IJCB), 2014. (**Best reviewed paper**)
 - H. Meng*, D. Huang*, H. Wang, **H. Yang**, M. Al-Shuraifi, Y. Wang: Depression Recognition based on Dynamic Facial and Vocal Expression Features using Partial Least Square Regression, ACM International Conference on Multimedia Workshop: Audio/Visual Emotion Challenge (AVEC), 2013 (* indicates equal contribution, **awarded the best entry** for the Affect Recognition Sub-Challenge).

Honors and Awards:

- The 6th Youth Talent Support Program of China Association for Science and Technology (CAST), 2021.
- The Shi Qingyun Female Scientist Award from the China Society of Image and Graphics (CSIG), 2019.
- 2013 Best Entry Award for the Affect Recognition Sub-Challenge (ASC) in AVEC at ACM Multimedia Conference (with H. Meng, H. Wang, H. Yang, M. Al-Shuraifi, and Y. Wang)

Teaching:

Pattern Recognition, Undergraduates, Fall & Spring Semester (2022-2024)
 Pattern Recognition and Machine Learning, Graduates, Fall Semester (2022-2023)

Academic Activities:

Reviewers: International Journal of Computer Vision, IEEE Transactions on Circuits and Systems for Video Technology, IEEE Transactions on Biometrics, Behavior, and Identity Science, ACM Transactions on Multimedia Computing Communications and Applications, Neurocomputing, CVPR2021-2023, AAAI 2020-2023, ACM MM 2019-2023 *et al.*