

Jiankang Deng

Computer Vision Researcher

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Working Experiences

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| 04/23 - Now | Honorary Lecturer
Supervise Ph.D. students in computer vision research. | Imperial College London |
| 06/20 - Now | Project Manager & Principal Researcher
Design state-of-the-art vision algorithms for mobile cameras. | Huawei Noah's Ark Lab |
| 04/18 - 06/20 | Research & Development (R&D) Director
Design face analysis system on cloud and edge. | Facesoft |
| 06/19 - 09/19 | Intern
Face expression generation. Work with Tong Xiao . | Facebook |
| 03/15 - 08/15 | Intern
Clothing detection and analysis. Work with Shaoqing Ren , Yichen Wei , and Jian Sun . | Microsoft |
| 12/13 - 05/14 | Intern
Face detection and analysis. Work with Junjie Yan , Yafeng Deng , and Chang Huang . | Baidu |

Education Background

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| 10/16 - 09/20 | Doctor's Degree in Computing
I was supervised by Prof. Stefanos Zafeiriou and funded by the Imperial President's PhD Scholarships in the Intelligent Behaviour Understanding Group (IBUG). My research topic was deep face analysis. | Imperial College London |
| 09/12 - 06/15 | Master's Degree in System Science
I was supervised by Prof. Qingshan Liu in the BDAT Lab and worked closely with Prof. Dacheng Tao . My research topic was face alignment. I also won many international visual perception challenges (e.g. ImageNet and ActivityNet) during my master's study. | Nanjing University of Information Science and Technology |
| 09/08 - 06/12 | Bachelor's Degree in System Engineer
I ranked 1st in the department and I passed three high-level qualification certificates (e.g. System Analyst, System Architect, and Information Technology Project Management). | Nanjing University of Information Science and Technology |

Academic Project Experiences

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| 10/16 - 09/20 | PhD Project on 2D Computer Vision
Face matching for automatic identity retrieval, recognition, verification and management. | FACER2VM |
| 01/19 - 09/20 | PhD Project on 3D Computer Vision
Large scale shape analysis of deformable models of humans. | DEFORM |

Teaching Experiences

10/16 - 10/18	Machine Learning Lab tutor under Prof. Maja Pantic . Supervise the experiments and answer students' questions.	Post-graduate Course
10/16 - 10/18	Introduction to Databases Teaching assistant under Peter McBrien. Answer students' questions and mark the experimental reports.	Undergraduate Course

Workshop Organisations

1. ICCV 2023, View Synthesis for Human Heads Challenge & Workshop.
2. CVPR 2023, Face Anti-spoofing Challenge & Workshop.
3. ICCV 2021, Masked Face Recognition Challenge & Workshop.
4. ICCV 2019, Lightweight Face Recognition Challenge & Workshop.
5. ICCV 2017, 3D Face Tracking in-the-wild Competition.
6. CVPR 2017, 2D Facial Landmark Localisation Competition - The Menpo BenchMark.

Invited Talks

1. ECCV 2022, International Workshop and Challenge on People Analysis, Perspective Reconstruction of Human Faces by Joint Mesh and Landmark Regression.
2. ICCV 2019, Disguised Face Recognition Challenge, ArcFace for Disguised Face Recognition.
3. ICCV 2019, Wider Face and Person Challenge, RetinaFace: Single-stage Dense Face Localisation in the Wild.
4. CVPR 2017, ActivityNet Large Scale Activity Recognition Challenge, Improve Untrimmed Video Classification and Action Localization by Human and Object Tubelets.
5. CVPR 2017, Beyond ImageNet Large Scale Visual Recognition Challenge, Speed/Accuracy Trade-offs for Object Detection from Video.
6. CVPR 2017, Beyond ImageNet Large Scale Visual Recognition Challenge, BDAT Object Detection.
7. ECCV 2016, ImageNet and COCO Visual Recognition Challenges, Efficient Object Detection From Videos.
8. ICCV 2015, ImageNet and MS COCO Visual Recognition Challenges, Cascade Region Regression for Robust Object Detection.
9. ICCV 2015, 300 Videos in the Wild (300-VW) Challenge, Facial Shape Tracking via Spatio-temporal Cascade Shape Regression.

Awards

1. WCPA 2022, perspective projection based monocular 3D face reconstruction, **Rank 1st**.
2. Baidu Talent 2021, Global Top 100 Chinese Rising Stars in Artificial Intelligence.
3. DFW 2019, disguised face recognition challenge, **Rank 1st**.
4. WiderFace 2019: wider face and person challenge, **Rank 2nd**.
5. iQIYI-VID 2018: iQIYI celebrity video identification challenge, **Rank 1st**.
6. ActivityNet 2017: untrimmed video classification, **Rank 1st**.

7. ILSVRC 2017: Object detection/tracking from videos, **Rank 1st**.
8. ILSVRC 2017: Object detection, **Rank 1st**.
9. ILSVRC 2016: Object detection/tracking from videos, **Rank 1st**.
10. ILSVRC 2015: Object detection, **Rank 1st**.
11. ILSVRC 2015: Object detection/tracking from videos, **Rank 1st**.
12. 300VW 2015: Face detection/alignment/tracking, **Rank 1st**.
13. 300W 2014: Face detection/alignment, **Rank 1st**.

Journal Publications

1. Francesca Babiloni, Ioannis Marras, **Jiankang Deng**, Filippos Kokkinos, Matteo Maggioni, Grigorios Chrysos, Philip Torr, Stefanos Zafeiriou. Linear Complexity Self-Attention with 3^{rd} Order Polynomials, TPAMI 2023.
2. Zheng Zhu, Guan Huang, **Jiankang Deng**, Yun Ye, Junjie Huang, Xinze Chen, Jiagang Zhu, Tian Yang, Jiwen Lu, Dalong Du, Jie Zhou. WebFace260M: A Benchmark Unveiling the Power of Million-Scale Deep Face Recognition, TPAMI 2023.
3. Xiaobo Xia, Tongliang Liu, Bo Han, Nannan Wang, **Jiankang Deng** Jiatong Li, Yinian Mao. Extended T: Learning with Mixed Closed-set and Open-set Noisy Labels, TPAMI 2023.
4. Kaihao Zhang, Dongxu Li, Wenhan Luo, Jingyu Liu, **Jiankang Deng**, Wei Liu, Stefanos Zafeiriou. EDFace-Celeb-1M: Benchmarking Face Hallucination with a Million-scale Dataset, TPAMI 2023.
5. Zhipeng Du, Miaoqing Shi, **Jiankang Deng**, Stefanos Zafeiriou. Redesigning Multi-Scale Neural Network for Crowd Counting, TIP 2023.
6. Qingping Zheng, Ling Zheng, Yunpeng Bai, Hang Liu, **Jiankang Deng**, Ying Li. Boundary-Aware Network With Two-Stage Partial Decoders for Salient Object Detection in Remote Sensing Images, TGRS 2023.
7. Chengcheng Ma, Yang Liu, **Jiankang Deng**, Lingxi Xie, Weiming Dong, and Changsheng Xu. Understanding and Mitigating Overfitting in Prompt Tuning for Vision-Language Models, TCSVT 2023.
8. **Jiankang Deng**, Jia Guo, Jing Yang, Niannan Xue, Irene Cotsia, Stefanos P Zafeiriou. ArcFace: Additive Angular Margin Loss for Deep Face Recognition, TPAMI 2022.
9. Grigorios G. Chrysos, Stylianos Moschoglou, Giorgos Bouritsas, **Jiankang Deng**, Yannis Panagakis, Stefanos Zafeiriou. Deep Polynomial Neural Networks, TPAMI 2022.
10. Niannan Xue, **Jiankang Deng**, Shiyang Cheng, Yannis Panagakis, Stefanos Zafeiriou. Side Information for Face Completion: a Robust PCA Approach, TPAMI 2019.
11. **Jiankang Deng**, Anastasios Roussos, Grigorios Chrysos, Evangelos Ververas, Irene Kotsia, Jie Shen, Stefanos Zafeiriou. The Menpo Benchmark for Multi-pose 2D and 3D Facial Landmark Localisation and Tracking, IJCV 2019.
12. **Jiankang Deng**, George Trigeorgis, Yuxiang Zhou, Stefanos Zafeiriou. Joint Multi-view Face Alignment in the Wild, TIP 2019.
13. Hui Shuai, Qingshan Liu, Kaihua Zhang, Jing Yang, **Jiankang Deng**. Cascaded Regional Spatio-Temporal Feature-Routing Networks for Video Object Detection, IEEE Access 2018.
14. Zhenbo Yu, Guangcan Liu, Qingshan Liu, **Jiankang Deng**. Spatio-temporal convolutional features with nested LSTM for facial expression recognition, Neurocomputing 2018.
15. Qingshan Liu, Jing Yang, **Jiankang Deng**, Kaihua Zhang. Robust facial landmark tracking via cascade regression, PR 2017.

16. Qingshan Liu, **Jiankang Deng**, Jing Yang, Guangcan Liu, Dacheng Tao. Adaptive Cascade Regression Model For Robust Face Alignment, TIP 2017.
17. Qingshan Liu, **Jiankang Deng**, Dacheng Tao. Dual Sparse Constrained Cascade Regression for Robust Face Alignment, TIP 2016.
18. **Jiankang Deng**, Qingshan Liu, Jing Yang, Dacheng Tao. M^3 CSR: Multi-view, multi-scale and multi-component cascade shape regression, IVC 2016.
19. Xiaoyan Li, Tongliang Liu, **Jiankang Deng**, Dacheng Tao. Video Face Editing Using Temporal-Spatial-Smooth Warping, ACM TIST 2016.
20. XiaoTong Yuan, Zhenzhen Wang, **Jiankang Deng**, Qingshan Liu. Efficient X^2 Kernel Linearization via Random Feature Maps, TNNLS 2016.
21. **Jiankang Deng**, Yubao Sun, Qingshan Liu, Hanqing Lu. Low rank driven robust facial landmark regression, Neurocomputing 2015.

Conference Publications

1. Kaicheng Yang, **Jiankang Deng**, Xiang An, Jiawei Li, Ziyong Feng, Jia Guo, Jing Yang, Tongliang Liu. ALIP: Adaptive Language-Image Pre-training with Synthetic Caption, ICCV 2023.
2. Xiaobo Xia, **Jiankang Deng**, Wei Bao, Yuxuan Du, Bo Han, Shiguang Shan, Tongliang Liu. Holistic Label Correction for Noisy Multi-Label Classification, ICCV 2023.
3. Xiao Han, Xiatian Zhu, **Jiankang Deng**, Yi-Zhe Song, Tao Xiang. Controllable Person Image Synthesis with Pose-Constrained Latent Diffusion, ICCV 2023.
4. Sauradip Nag, Xiatian Zhu, **Jiankang Deng**, Yi-Zhe Song, Tao Xiang. DiffTAD: Temporal Action Detection with Conditioned Location Diffusion, ICCV 2023.
5. Guanxiong Sun, Chi Wang, Zhaoyu Zhang, **Jiankang Deng**, Stefanos Zafeiriou, Yang Hua. Spatio-temporal Prompting Network for Robust Video Feature Extraction, ICCV 2023.
6. Jun Dan, Yang Liu, Haoyu Xie, **Jiankang Deng**, Haoran Xie, Xuansong Xie, Baigui Sun. TransFace: Calibrating Transformer Training for Face Recognition from a Data-Centric Perspective, ICCV 2023.
7. Francesca Babiloni, Matteo Maggioni, Thomas Tanay, **Jiankang Deng**, Ales Leonardis, Stefanos Zafeiriou. Adaptive Spiral Layers for Efficient 3D Representation Learning on Meshes, ICCV 2023.
8. Xingyu Ren, **Jiankang Deng**, Chao Ma, Yichao Yan, Xiaokang Yang. Improving Fairness in Facial Albedo Estimation via Visual-Textual Cues, CVPR 2023. **(Highlight)**
9. Alexandros Lattas, Stylianos Moschoglou, Stylianos Ploumpis, Baris Gecer, **Jiankang Deng**, Stefanos Zafeiriou. FitMe: Deep Photorealistic 3D Morphable Model Avatars, CVPR 2023.
10. Grigorios Chrysos, Bohan Wang, **Jiankang Deng**, Volkan Cevher. Regularization of polynomial networks for image recognition, CVPR 2023.
11. Xiang An, **Jiankang Deng**, Kaicheng Yang, Jiawei Li, Ziyong Feng, Jia Guo, Jing Yang, Tongliang Liu. Unicom: Universal and Compact Representation Learning for Image Retrieval, ICLR 2023.
12. Yang Liu, **Jiankang Deng**, Fei Wang, Lei Shang, Xuansong Xie, Baigui Sun. DamoFD: Digging into Backbone Design on Face Detection, ICLR 2023.
13. Zhipeng Du, **Jiankang Deng**, Miaoqing Shi. Domain-general Crowd Counting in Unseen Scenarios, AAAI 2023. **(Oral)**
14. Xingyu Ren, Alexandros Lattas, Baris Gecer, **Jiankang Deng**, Chao Ma, Xiaokang Yang. Facial Geometric Detail Recovery via Implicit Representation, FG 2023.

15. Yunqi Miao, Alexandros Lattas, **Jiankang Deng**, Jungong Han, Stefanos Zafeiriou. Physically-Based Face Rendering for NIR-VIS Face Recognition, NerulIPS 2022.
16. Konstantinos Panagiotis Alexandridis, **Jiankang Deng**, Anh Nguyen, Shan Luo. Long-tailed Instance Segmentation using Gumbel Optimized Loss, ECCV 2022.
17. Grigorios Chrysos, Markos Georgopoulos, **Jiankang Deng**, Jean Kossaifi, Yannis Panagakis, Animesh Anandkumar. Augmenting Deep Classifiers with Polynomial Neural Networks, ECCV 2022.
18. Athanasios Papaioannou, Baris Gecer, Shiyang Cheng, Grigorios Chrysos, **Jiankang Deng**, Eftychia Fotiadou, Christos Kampouris, Dimitrios Kollias, Stylianos Moschoglou, Kritaphat Songsri-in, Stylianos Ploumpis, George Trigeorgis, Panagiotis Tzirakis, Evangelos Ververas, Yuxiang Zhou, Allan Ponniah, Anastasios Roussos, Stefanos Zafeiriou. MimicME: A Large Scale Diverse 4D Database for Facial Expression Analysis, ECCV 2022.
19. Qingping Zheng, **Jiankang Deng**, Zheng Zhu, Ying Li, Stefanos Zafeiriou. Decoupled Multi-task Learning with Cyclical Self-Regulation for Face Parsing, CVPR 2022.
20. Xiang An, **Jiankang Deng**, Jia Guo, Ziyong Feng, XuHan Zhu, Jing Yang, Tongliang Liu. Killing Two Birds with One Stone: Efficient and Robust Training of Face Recognition CNNs by Partial FC, CVPR 2022.
21. Yang Liu, Wang steven, Zhipeng Zhou, **Jiankang Deng**, Baigui Sun, Hao Li. MogFace: Towards a Deeper Appreciation on Face Detection, CVPR 2022.
22. Jia Guo, **Jiankang Deng***, Alexandros Lattas, Stefanos Zafeiriou. Sample and Computation Redistribution for Efficient Face Detection, ICLR 2022. (* denotes equal contribution.)
23. **Jiankang Deng**, Jia Guo, Jing Yang, Alexandros Lattas, Stefanos Zafeiriou. Variational Prototype Learning for Deep Face Recognition, CVPR 2021.
24. Baris Gecer, **Jiankang Deng**, Stefanos Zafeiriou. OSTeC: One-Shot Texture Completion, CVPR 2021.
25. Zheng Zhu, Guan Huang, **Jiankang Deng**, Yun Ye, Junjie Huang, Xinze Chen, Jiagang Zhu, Tian Yang, Jiwen Lu, Dalong Du, Jie Zhou. WebFace260M: A Benchmark Unveiling the Power of Million-Scale Deep Face Recognition, CVPR 2021.
26. Babiloni, Francesca, Ioannis Marras, Filippos Kokkinos, **Jiankang Deng**, Grigorios Chrysos, Stefanos Zafeiriou. Poly-NL: Linear Complexity Non-Local Layers With 3rd Order Polynomials, ICCV 2021.
27. Zhu, Zheng, Xianda Guo, Tian Yang, Junjie Huang, **Jiankang Deng**, Guan Huang, Dalong Du, Jiwen Lu, Jie Zhou. Gait Recognition in the Wild: A Benchmark, ICCV 2021.
28. Yu Yao, Tongliang Liu, Bo Han, Mingming Gong, **Jiankang Deng**, Gang Niu, Masashi Sugiyama. Dual T: Reducing Estimation Error for Transition Matrix in Label-noise Learning, NeurIPS 2020.
29. **Jiankang Deng**, Jia Guo, Tongliang Liu, Mingming Gong, Stefanos Zafeiriou. Sub-center ArcFace: Boosting Face Recognition by Large-Scale Noisy Web Faces, ECCV 2020.
30. Baris Gecer, Alexandros Lattas, Stylianos Ploumpis, **Jiankang Deng**, Athanasios Papaioannou, Stylianos Moschoglou, Stefanos Zafeiriou. Synthesizing Coupled 3D Face Modalities by Trunk-Branch Generative Adversarial Networks, ECCV 2020.
31. **Jiankang Deng**, Jia Guo, Evangelos Ververas, Irene Kotsia, Stefanos Zafeiriou. RetinaFace: Single-stage Dense Face Localisation in the Wild, CVPR 2020.
32. Grigorios G Chrysos, Stylianos Moschoglou, Giorgos Bouritsas, **Jiankang Deng**, Yannis Panagakis, Stefanos Zafeiriou. Pi-nets: Deep Polynomial Neural Networks, CVPR 2020.
33. Zhihang Li, Teng Xi, **Jiankang Deng**, Gang Zhang, Shengzhao Wen, Ran He. GP-NAS: Gaussian Process based Neural Architecture Search, CVPR 2020.
34. **Jiankang Deng**, Jia Guo, Niannan Xue, Stefanos Zafeiriou. ArcFace: Additive Angular Margin Loss for Deep Face Recognition, CVPR 2019. (Oral)

35. Yuxiang Zhou, **Jiankang Deng***, Irene Kotsia, Stefanos Zafeiriou. Dense 3D Face Decoding over 2500FPS: Joint Texture & Shape Convolutional Mesh Decoders, CVPR 2019. (* denotes equal contribution.)
36. **Jiankang Deng**, Shiyang Cheng, Niannan Xue, Yuxiang Zhou, Stefanos Zafeiriou. UV-GAN: Adversarial Facial UV Map Completion for Pose-invariant Face Recognition, CVPR 2018.
37. Jia Guo, **Jiankang Deng**, Niannan Xue, Stefanos Zafeiriou. Stacked Dense U-Nets with Dual Transformers for Robust Face Alignment, BMVC 2018.
38. Niannan Xue, **Jiankang Deng**, Yannis Panagakis, Stefanos Zafeiriou. Informed Non-convex Robust Principal Component Analysis with Features, AAAI 2018. **(Oral)**
39. **Jiankang Deng**, Yuxiang Zhou, Shiyang Cheng, Stefanos Zafeiriou. Cascade Multi-view Hourglass Model for Robust 3D Face Alignment, FG 2018.
40. Yuxiang Zhou, **Jiankang Deng**, Stefanos Zafeiriou. Improve Accurate Pose Alignment and Action Localization by Dense Pose Estimation, FG 2018.

Workshop Publications

1. Francesca Babiloni, Thomas Tanay, **Jiankang Deng**, Matteo Maggioni, Stefanos Zafeiriou. Factorized Dynamic Fully Connected Layers for Neural Networks, ICCV Workshops 2023.
2. Dong Wang, Jia Guo, Qiqi Shao, Haochi He, Zhian Chen, Chuanbao Xiao, Ajian Liu, Sergio Escalera, Hugo Jair Escalante, Zhen Lei, Jun Wan, **Jiankang Deng**. Wild Face Anti-Spoofing Challenge 2023: Benchmark and Results, CVPR Workshops 2023.
3. Guo Jia, Jinke Yu, Alexandros Lattas, **Jiankang Deng**. Perspective Reconstruction of Human Faces by Joint Mesh and Landmark Regression, ECCV Workshops 2022.
4. **Jiankang Deng**, Jia Guo, Xiang An, Zheng Zhu, Stefanos Zafeiriou. Masked Face Recognition Challenge: The InsightFace Track Report, ICCV Workshops 2021.
5. Zhu, Zheng, Guan Huang, **Jiankang Deng**, Yun Ye, Junjie Huang, Xinze Chen, Jiagang Zhu, Tian Yang, Jia Guo, Jiwen Lu, Dalong Du, Jie Zhou. Masked Face Recognition Challenge: The Web-face260m Track Report, ICCV Workshops 2021.
6. **Jiankang Deng**, Jia Guo, Debing Zhang, Yafeng Deng, Xiangju Lu, Song Shi. Lightweight Face Recognition Challenge, ICCV Workshops 2019.
7. **Jiankang Deng**, Jia Guo, Stefanos Zafeiriou. Single-Stage Joint Face Detection and Alignment, ICCV Workshops 2019.
8. **Jiankang Deng**, Stefanos Zafeiriou. ArcFace for Disguised Face Recognition, ICCV Workshops 2019.
9. Stefanos Zafeiriou, Grigorios G. Chrysos, Anastasios Roussos, Evangelos Ververas, **Jiankang Deng**, George Trigeorgis. The 3D Menpo Facial Landmark Tracking Challenge, ICCV Workshops 2017.
10. **Jiankang Deng**, Yuxiang Zhou, Stefanos Zafeiriou. Marginal Loss for Deep Face Recognition, CVPR Workshops 2017.
11. Stylianos Moschoglou, Athanasios Papaioannou, Christos Sagonas, **Jiankang Deng**, Irene Kotsia, Stefanos Zafeiriou. AgeDB: The First Manually Collected, In-the-Wild Age Database, CVPR Workshops 2017.
12. Stefanos Zafeiriou, George Trigeorgis, Grigorios Chrysos, **Jiankang Deng**, Jie Shen. The Menpo Facial Landmark Localisation Challenge: A Step Towards the Solution, CVPR Workshops 2017.
13. Jing Yang, **Jiankang Deng**, Kaihua Zhang, Qingshan Liu. Facial Shape Tracking via Spatio-Temporal Cascade Shape Regression, ICCV Workshops 2015.

Patents

1. **GB2576784**: Facial landmark localisation system and method. **Jiankang Deng** and Stefanos Zafeiriou. (Granted)
2. **GB2582833**: Facial localisation in images. **Jiankang Deng** and Stefanos Zafeiriou. (Granted)
3. **GB2592076**: Method of training an image classification model. **Jiankang Deng** and Stefanos Zafeiriou. (Granted)
4. **GB2581536**: Joint shape and texture decoders for three-dimensional rendering. **Jiankang Deng**, Yuxiang Zhou and Stefanos Zafeiriou. (Pending)
5. **US20220147790A1**: Deep Polynomial Neural Networks. Stefanos Zafeiriou, **Jiankang Deng**, Stylianos Moschoglou and Grigorios Chrysos. (Pending)

Area Chairs

1. Area Chair of Computer Vision and Pattern Recognition (CVPR), 2024

Review Services

1. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI, Impact Factor: 16.39)
2. International Journal of Computer Vision (IJCV, Impact Factor: 11.54)
3. IEEE Transactions on Image Processing (TIP, Impact Factor: 10.86)
4. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR, h5 index: 356)
5. International Conference on Learning Representations (ICLR, h5 index: 253)
6. Neural Information Processing Systems (NeurIPS, h5 index: 245)
7. International Conference on Machine Learning (ICML, h5 index: 204)
8. European Conference on Computer Vision (ECCV, h5 index: 197)
9. IEEE/CVF International Conference on Computer Vision (ICCV, h5 index: 184)
10. AAAI Conference on Artificial Intelligence (AAAI, h5 index: 157)