張 凱鵬 (ZHANG, KAIPENG)

About Me
E-mail: kpzhang@ut-vision.org

I am a second-year Ph.D. student in the Graduate School of Information Science and Technology at The University of Tokyo, supervised by Prof. Yoichi Sato. Before coming to UTokyo, I received my M.S. degree in 2018 from National Taiwan University and B.E. degree in 2016 from Donghua University.

I was a researcher in SenseTime and algorithm consultant in ULSee. I also did research internships at Microsoft Research Asia, Tencent AI Lab, and MMLAB of SIAT. My research interest mainly lies in computer vision, machine learning, and focus on face analysis, active learning, and few-shot learning. My works received over **3700 citations** and **3700 GitHub Stars**. I also won some face analysis competition in CVPR and ICMI.

Education

Ph.D. - The University of Tokyo, Japan | *04/2019 – 03/2022*
Graduate School of Information Science and Technology

supervised by Prof. Yoichi Sato

M.S. - National Taiwan University, Taiwan | *09/2016 – 08/2018*
Graduate Institute of Networking and Multimedia,

supervised by Prof. Winston Hsu.

B.E. - Donghua University, China | *09/2012 – 07/2016*
Computer Networking (*Excellent Engineer Program*)

Experience

Tencent AI Lab | *09/2020 – 12/2020*
Research Intern (Tencent Rhino-Bird Elite Training Program)

Mentor: Dr. Zhifeng Li and Dr. Wei Liu

-   AutoML for face analysis

The University of Tokyo | *04/2019 – 03/2022*
Ph.D. student & Research assistant (JSPS Fellowship)

Advisor: Prof. Yoichi Sato

-   Semantic segmentation**,** few-shot learning and active learning

SenseTime Group Ltd. | *09/2018 – 03/2019*
Researcher

-   A core team member to build an incremental large-scale face recognition learning system for ShenZhen Security Bureau.

National Taiwan University | *09/2016 – 08/2018*
Master student & Research assistant

Advisor: Prof. Winston Hsu

-   Face hallucination and recognition. *ECCV 2018 & CVPRW 2018*
-   Virtual try-on shoe. *ACCV 2018*
-   Disguised face recognition in the wild. *Rank 1 in Disguised Faces in the Wild Challenge, CVPR 2018.*
-   Group-level emotion recognition in the wild.

    Rank 1 in EmotionW, ICMI Grand Challenge 2017

    Rank 2 in EmotionW, ICMI Grand Challenge 2018

ULSee Technology Co., Ltd. | *10/2016 – 03/2018*
Algorithm consultant for real-world face analysis products.

Tencent AI Lab   *07/2017 – 09/2017*

Research Intern

Mentor: Dr. Zhifeng Li and Dr. Wei Liu

- Real-time face detection and alignment. *ICCV 2017*

Multimedia Laboratory, Shenzhen Institutes of Advanced Technology   *07/2015 – 08/2016*

Visiting student

Advisor: Prof. Zhifeng Li and Prof. Yu Qiao

- Face Recognition.

   A discriminative deep feature learning approach. *ECCV 2016 & IJCV*

   One of the most cited face recognition and metric learning papers.

- Face detection and alignment.

   A multi-task cascaded convolutional networks. *IEEE SPL.*

   One of the most cited face detection papers.

- Facial attributes recognition.

   A deep convolutional neural network approach.

   Primary contributor: Rank 1 in ChaLearn Looking at People Challenge - Track 2 & 3, CVPR 2016.

Publications (received 3700 citations, Sep. 2020)

Regular paper

* indicate equal contribution

1. Zhanpeng Zhang, **Kaipeng Zhang**, "FarSee-Net: Real-Time Semantic Segmentation by Efficient Multi-scale Context Aggregation and Feature Space Super-resolution", *ICRA 2020.*

2. Yandong Wen*, **Kaipeng Zhang***, Zhifeng Li and Yu Qiao, "A Comprehensive Study on Center Loss for Deep Face Recognition", *IJCV 2019. (a.k.a Center Loss)*

3. **Kaipeng Zhang**, Zhanpeng Zhang, Chia-Wen Cheng, Winston Hsu, Yu Qiao, Wei Liu and Tong Zhang, "Super-Identity Convolutional Neural Network for Face Hallucination", *ECCV 2018.*

4. Chao-Te Chou, Cheng-Han Lee, **Kaipeng Zhang**, Hu Cheng Lee and Winston Hsu, "Pose Invariant Virtual Try-On Shoe with Conditional Image Completion", *ACCV 2018.*

5. Cheng-Han Lee, **Kaipeng Zhang**, Hu Cheng Lee, Chia-Wen Cheng and Winston Hsu, "Attribute Augmented Convolutional Neural Network for Face Hallucination", *CVPRW 2018.*

6. **Kaipeng Zhang**, Zhanpeng Zhang, Hao Wang, Zhifeng Li, Yu Qiao and Wei Liu, "Detecting Faces Using Inside Cascaded Contextual CNN", *ICCV 2017.*

7. Yandong Wen, **Kaipeng Zhang,** Zhifeng Li and Yu Qiao, "A Discriminative Deep Feature Learning Approach for Face Recognition", *ECCV 2016. (a.k.a Center Loss)*

8. **Kaipeng Zhang**, Zhanpeng Zhang, Zhifeng Li and Yu Qiao, "Joint Face Detection and Alignment using Multi-task Cascaded Convolutional Networks", *IEEE SPL 2016. (a.k.a MTCNN face detector)*

Competition paper

1. Guo, Da, Kai Wang, Jianfei Yang, **Kaipeng Zhang**, Xiaojiang Peng, and Yu Qiao, "Exploring Regularizations with Face, Body and Image Cues for Group Cohesion Prediction," *ICMI 2019.*

2. Wang, Kai, Jianfei Yang, Da Guo, **Kaipeng Zhan**g, Xiaojiang Peng, and Yu Qiao, "Bootstrap model ensemble and rank loss for engagement intensity regression," *ICMI 2019.*

3. **Kaipeng Zhang**, Ya-Liang Chang and Winston Hsu, "Deep Disguised Faces Recognition", *CVPRW 2018*

4. Kai Wang, Xiaoxing Zeng, Jianfei Yang, Debin Meng, **Kaipeng Zhang**, Xiaojiang Peng and Yu Qiao, "Cascade Attention Networks for Group Emotion Recognition with Face, Body and Image Cues", *ICMI 2018.*

5. Lianzhi Tan, **Kaipeng Zhang**, Kai Wang, Xiaoxing Zeng, Xiaojiang Peng and Yu Qiao, "Group Emotion Recognition with Individual Facial Emotion CNNs and Global Image Based CNNs", *ICMI 2017.*

6. **Kaipeng Zhang**, Lianzhi Tan, Zhifeng Li, Yu Qiao, "Gender and Smile Classification using Deep Convolutional Neural Networks", *CVPRW 2016.*

Selected Honors & Awards

JSPS Research Fellowships for Young Scientists	2020
Tencent Rhino-Bird Elite Training Program	2020
Collaborative Research Program, The University of Tokyo	2019
Scholarships from Foundation's Support Fund, The University of Tokyo	2019
MSRA Fellowship Nomination Award	2019
Outstanding Undergraduate Thesis, Donghua University	2016

Selected Competitions

Primary contributor

Disguised Faces in the Wild Workshop, CVPR 2018, ***Rank 1***	2018
Group-level emotion recognition, EmotiW, ICMI 2017 Grand Challenge, ***Rank 1***	2017
Accessories Classification, ChaLearn Looking at People Challenging, CVPR 2016, ***Rank 1***	2016
Smile and Gender Classification, ChaLearn Looking at People Challenging, CVPR 2016, ***Rank 1***	2016

Secondary contributor

Group-based Cohesion Prediction, EmotiW, ICMI 2019 Grand Challenge, ***Rank 2***	2019
Engagement Prediction in the Wild, EmotiW, ICMI 2019 Grand Challenge, ***Rank 3***	2019
Group-level emotion recognition, EmotiW, ICMI 2018 Grand Challenge, ***Rank 2***	2018

Academic Service

Reviewer/Program committee of NeurIPS, ICLR, AAAI, ECCV, ICCV, CVPR, WACV, ACCV, TPAMI, TIP, TNNLS, TCSVT, TMM, Neurocomputing, Pattern Recognition, and SPL.