張凱鵬 (ZHANG, Kaipeng)

General Information

I am a master student of department of Computer Science and Information Engineering, National Taiwan University supervised by Prof. Winston Hsu. Before coming to NTU, I got my B.Eng. degree in the College of Computer Science & Technology, Donghua University in June 2016. Besides, I was a research assistant at MMLAB of the Chinese University of Hong Kong at Shenzhen under the supervision of Prof. Zhifeng Li and Prof. Yu Qiao. My research interest mainly lies in computer vision, deep learning, and face analysis.

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Education

Undergraduate: in Computer Science and Information Engineering, 2016 - persent
College of Electrical Engineering & Computer Science
National Taiwan University, Taiwan

Undergraduate: in Computer Network Engineering (The class of excellent engineer), 2013 - 2016
College of Computer Science & Technology School
Donghua University, Shanghai, China
GPA: 87/100

Undergraduate: in Electronic Information Engineering, 2012 - 2013
College of Information, Mechanical and Electronic Engineering
Shanghai Normal University, Shanghai, China
GPA: 85/100

Research Interests

Computer Vision: Face analysis, face detection
Recognition and Machine Learning: Deep learning

Publications

Yandong Wen, **Kaipeng Zhang,** Zhifeng Li, Yu Qiao, "A Discriminative Deep Feature Learning Approach for Face Recognition," *European Conference on Computer Vision (ECCV)*, 2016 (accepted)

Kaipeng Zhang, Lianzhi Tan, Zhifeng Li, Yu Qiao, "Gender and Smile Classification using Deep Convolutional Neural Networks," in *IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPRW)*, 2016

Kaipeng Zhang, Zhanpeng Zhang, Zhifeng Li, Yu Qiao, "Joint Face Detection and Alignment using Multi-task Cascaded Convolutional Networks," *IEEE Signal Processing Letters* (accepted)

Honors & Awards

ChaLearn Looking at People workshop, CVPR 2016 - Track 2	First Price (1st winner)	2016
ChaLearn Looking at People workshop, CVPR 2016 - Track 3	First Price (1st winner)	2016
Outstanding Undergraduate Thesis	Donghua University	2016
China Undergraduate Mathematical Contest in Modeling	Second Prize Shanghai	2015
Wuyi Mathematical Contest Third Prize	Jiangsu Province	2015
MathorCup & CAA Worldwide Mathematical Contest	Winner Price China	2015
China Undergraduate Mathematical Contest in Modeling	Third Prize Shanghai	2014
Mathematical Contest in Modeling Third Prize	Donghua University	2014
ACM-ICPC Contest on Campus Third Prize	Donghua University	2014

Second Prize Scholarship		Shanghai Normal University	2013
Mathematical Contest in Modeling	Second Prize	Shanghai Normal University	2012

Internship

Shenzhen institutes of advanced technology, Chinese academy of sciences, visiting student 2015.07 - 2016.08

Research Experience

Gender and Smile Classification using Deep Convolutional Neural Networks 2016.03

- Propose a multi-task and general-to-specific fine-tuning scheme that exploits the inherent correlation between face identity, gender, smile and other face attributes
- Propose a tasks-aware face cropping scheme
- This work has been accepted by CVPRW 2016 and win the First Price of ChaLearn Looking at People Challenge (Track 2).

Face recognition using discriminative deep feature learning approach 2016.02 - 2016.03

- Joint supervision of softmax loss and center loss (designed by us) to obtain the deep features with the two key learning objectives, inter-class dispersion and intra-class compactness as much as possible
- Achieves the state-of-the-art results on MegaFace (Small Training Set) and competitive results on LFW and YTF
- This work has been accepted by ECCV 2016

Face detection and alignment by deep learning 2015.07 - 2016.01

- Joint face and facial landmark detection using cascaded CNNs framework.
- Achieves the state-of-the-art performance in FDDB, WIDER FACE benchmark for face detection and AFLW benchmark for face alignment in high running speed.
- This work has been accepted by IEEE Signal Processing Letters

Project Experience

Useless commodity comment classification 2015.05

- Build comment vector model (Use jieba Chinese word segmentation module, TF-IDF formula, stacked autoencoder)
- Useless comment classification (Use random forest and K-means for labeled and none labeled data situation)

Microblog user modeling and public opinion analysis 2014.12 - 2016.05

- Build a user model based on ontology (Use TF-IDF formula, Baidu baike as ontology)
- Topic and public opinion analysis (Use LDA topic model and random forest for public opinion classification)

The application of face recognition in video retrieval 2014.09 - 2014.11

- Use Eigenface for face recognition and retrieve video by personal identity
- The system runs on Hadoop for large-scale data processing

English & Professional Skill

English: CET4 (529)

Senior Network Engineer (approved and authorized by the Ministry of Human Resources an Social Security, China)

EMC Academic Associate, Information Storage and Management

EMC Academic Associate, Cloud Infrastructure and Services

C/C++, Python, and Matlab programming