張凱鵬 (ZHANG, Kaipeng)

General Information

I got my B.Eng. degree in the School of Computer Science & Technology, Donghua University in June 2016, and now I am a research assistant at Multimedia Laboratory, Shenzhen Institutes of Advanced Technology, Chinese Academy of Science. My research interests include computer vision and machine learning, particularly face analysis and deep learning.

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Education

Undergraduate: in Computer Network Engineering (The class of excellent engineer), 2013-2016
Computer Science and 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 (accepted)

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

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
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 - now

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

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
- Achieve the state-of-the-art results on MegaFace (Small Training Set) and competitive results on LFW and YTF

Face detection and alignment by deep learning 2015.07 – 2016.01

- Joint face and facial landmark detection using cascaded CNNs framework.
- Achieve the state-of-the-art performance in FDDB, WIDER FACE benchmark for face detection and AFLW benchmark for face alignment in high running speed.

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