

PEIZE SUN

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EDUCATION

Xi'an Jiaotong University, Xi'an, Shaanxi, China
M.E. in Electrical Engineering and Automation
Recommended Postgraduate
Advisor: Prof. Xiaohua Wang

Sep.2017 – now

Xi'an Jiaotong University, Xi'an, Shaanxi, China
B.E. in Electrical Engineering and Automation
Graduated with honor class
GPA: 88.66/100, **Overall Ranking: 1/64 (5/350)**

Sep.2013 – Jun.2017

PUBLICATIONS AND MANUSCRIPTS

Papers:(* indicates equal contribution)

- PolarMask: Single Shot Instance Segmentation with Polar Representation.**
Enze Xie*, **Peize Sun***, Xiaoge Song*, Wenhai Wang, Ding Liang, Chunhua Shen, Ping Luo.
In *Proceedings of Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.
- Double Anchor R-CNN for Human Detection in a Crowd.**
Kevin Zhang*, Feng Xiong*, **Peize Sun**, Li Hu, Boxun Li, Gang Yu.
Preprint arXiv:1909.09998.
- TextSR: Content-aware Text Super-Resolution via Recognition Guidance.**
Wenjia Wang*, Enze Xie*, **Peize Sun**, Wenhai Wang, Lixun Tian, Chunhua Shen, Ping Luo.
Preprint arXiv:1909.07113.
- Identification of Transmission Line Overheat Defects in Infrared Image based on Deep Learning.**
Feiyan Zhou, Xuandong Liu, Chengjun Liang, **Peize Sun**.
In *Proceedings of Chinese Conference of Electrical Engineering*, 2019.
- Development of Cloud Service Platform for Live Detection System of Switchgear.**
Peize Sun, Xiaonan Wang, Kang Yang, Xiaohua Wang, Mingzhe Rong.
In *Proceedings of Chinese Conference of Electrical Appliance Intelligent System*, 2017.

Patents:

- A Method for Flue Gas Pollutant Disposal Based on Wet Plasma.**
Peize Sun, Tianjie Qiao, Shuangrui Yin, Xiaohua Wang. *Chinese Patent*, 201610595948.5
- A Method and System for Managing and Monitoring Status of Electrical Equipment based on Cloud Service Platform.**
Mingzhe Rong, Xiaohua Wang, Kang Yang, Aijun Yang, Weidan Deng, Dingxin Liu, **Peize Sun**, DingLi Xie. *Chinese Patent*, 201710534456.X
- A Device for Smog Treatment.**
Lei Chen, Yu Xiao, **Peize Sun**, Weidan Deng, Zhehao Pei, Jiabei Ge, Linxin Miao, Haoyang Zhang, Wenquan Tao. *Chinese Patent*, 201721306285.7

RESEARCH EXPERIENCE

Megvii Inc. (Face++), Beijing, China

Dec.2018 – Nov.2019

Detection Group

Research Intern, *Mentors: Boxun Li, Dr. Gang Yu*

Topic: Object Detection & Instance Segmentation

- Constructed contour-based instance segmentation with polar representation[1]
- Implemented head-body-joint location for human detection in crowd[2]
- Improved object detection by re-defining positive and negative training examples
- Re-visited hard example mining training methods for pedestrian detection

University of California, Berkeley, Berkeley, CA, USA

Jul.2018 – Sep.2018

Berkeley Artificial Intelligence Research Lab

Visiting Student, *Mentor: Dr. Ke Li*

Project: Amodal Instance Segmentation

- Developed network architecture with random vector input to predict multimodal segmentation
- Implemented Implicit Maximum Likelihood Estimation algorithm in training process

Xi'an Jiaotong University, Xi'an, Shaanxi, China

Oct.2015 – Jun.2018

State Key Laboratory of Electrical Insulation and Power Equipment

Research Assistant, *Advisor: Prof. Xiaohua Wang*

Topic: Power Grid Unattended Operation and Maintenance

- Developed insulator overheat defects detection in infrared images[4]
- Constructed cloud service platform for power switchgear diagnosis[5]
- Implemented power transmission line detection and anomalous object detection

AWARDS

First-class Academic Scholarship

2018

Chiang Chen Enterprise Scholarship (top 2%)

2017,2018

First-class Recommended Postgraduate Scholarship

2017

National Scholarship (top 1%)

2016

National Endeavor Scholarship (top 1%)

2014,2015

COMPETITIONS

1st Place in Robust Reading Challenge on Arbitrary-Shaped Text of ICDAR

2nd Prize, "TI Cup" Electronic Design Contest of Shaanxi

2016

2nd Prize, National Contest on Energy Saving & Emission Reduction

2016

1st Prize (Meritorious Winner), Interdisciplinary Contest in Modeling of America

2016

SKILLS

Programming Languages

Python, MATLAB, C++

Deep Learning Tools

PyTorch, Caffe