# PEIZE SUN

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#### **EDUCATION**

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

Sep.2017 - Jun.2020(Expected)

M.E. in Electrical Engineering, Recommended Postgraduate

Advisor: Prof. Xiaohua Wang

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

Sep.2013-Jun.2017

B.E. in Electrical Engineering, Graduated with honor GPA: 88/100, Overall Ranking: 1/64 (5/350)

## RESEARCH EXPERIENCE

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

Dec.2018 - Nov.2019

**Detection Group** 

Research Intern, Mentors: Boxun Li, Dr. Ganq Yu[Link]

- Metric-Guiding-Hyperparameter design for accuracy general object detection [6]
- Noise-tolerant hard example mining method for dense object detection [5]
- Head-Body-Joint detection toward human detection in crowd [4]
- Content-aware text image super-resolution [3]

University of California, Berkeley, Berkeley, CA, USA

Jul.2018 - Sep.2018

Berkeley Artificial Intelligence Research Lab Visiting Student, Mentor: Dr. Ke Li[Link]

• Amodal instance segmentation via Conditional Implicit Maximum Likelihood Estimation [Poster]

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[Link]

- Power transmission overheat defects detection in infrared images[2]
- Cloud service platform for power switchgear diagnosis[1]
- Air purifier based on high-voltage stimulating plasma

#### PUBLICATIONS AND MANUSCRIPTS

#### Papers:

- Peize Sun, Xiaonan Wang, Kang Yang, Xiaohua Wang, Mingzhe Rong. Development of Cloud Service Platform for Live Detection System of Switchgear. Chinese Conference of Electrical Appliance Intelligent System, 2017. [PDF]
- 2. Feiyan Zhou, Xuandong Liu, Chengjun Liang, **Peize Sun**. Identification of Transmission Line Overheat Defects in Infrared Image based on Deep Learning. Chinese Conference of Electrical Engineering, 2019. [PDF] [PPT]
- 3. Wenjia Wang, Enze Xie, **Peize Sun**, Wenhai Wang, Lixun Tian, Chunhua Shen, Ping Luo. TextSR: Content-aware Text Super-Resolution via Recognition Guidance. arXiv preprint arXiv:1909.07113. [PDF]

- 4. Kevin Zhang, Feng Xiong, **Peize Sun**, Li Hu, Boxun Li, Gang Yu. Double Anchor R-CNN for Human Detection in a Crowd. arXiv preprint arXiv:1909.09998. [PDF]
- 5. **Peize Sun**, Li Hu, Hongkai Zhang, Feng Xiong, Boxun Li, Gang Yu. Effective Positive Learning for Single-Stage Pedestrian Detection.
- 6. Peize Sun, Hongkai Zhang, Boxun Li, Gang Yu. Evolutionary R-CNN.

#### Patents:

- 1. **Peize Sun**, Tianjie Qiao, Shuangrui Yin. A Method for Flue Gas Pollutant Disposal Based on Wet Plasma. Chinese Patent, 201610595948.5
- 2. Xiaohua Wang, **Peize Sun**, Tianjie Qiao. A Device for Flue Gas Pollutant Treatment. Chinese Patent, 201610595567.7
- 3. Mingzhe Rong, Xiaohua Wang, Kang Yang, Aijun Yang, Weidan Deng, Dingxin Liu, **Peize Sun**, DingLi Xie. A method and system for managing and monitoring status of electrical equipment based on cloud service platform. Chinese Patent, 201710534456.X(Public)
- 4. Lei Chen, Yu Xiao, **Peize Sun**, Weidan Deng. A Device for Smog Treatment. Chinese Patent, 201721306285.7(Public)
- 5. Liang Li, Li Zhang, Feiyan Zhou, Peilin Hao, Houkai Zhang, **Peize Sun**. A compact alternating current arc heating device and driving method. Chinese Patent, 201711308978.4(Public)

### AWARDS

Chiang Chen Enterprise Scholarship (top 2%)	2017,2018
National Scholarship (top 1%)	2016
National Endeavor Scholarship (top 1%)	2014,2015
1st Place in Robust Reading Challenge on Arbitrary-Shaped Text of ICDAR [Link]	2019
2rd Prize, "TI Cup" Electronic Design Contest of Shaanxi	2016
2rd 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, Caffe2