PEIZE SUN

Xi'an Jiaotong University ⋄ Xi'an, Shaanxi, 710049, P.R. China
(+86) 18392888870 ⋄ peizesun@gmail.com ⋄ https://peizesun.github.io

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. Gang Yu*[Link]

- Metric-Guiding-Hyperparameter design for accuracy general object detection [7]
- Hard example mining method for dense object detection [6]
- Contour-based instance segmentation [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

(* indicates equal contribution)

Papers:

1. **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. Tech report, 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. Tech report, arXiv:1909.09998. [PDF]

5. Enze Xie*, **Peize Sun***, Xiaoge Song*, Wenhai Wang, Xuebo Liu, Ding Liang, Chunhua Shen, Ping Luo. PolarMask: Single Shot Instance Segmentation with Polar Representation. Tech report, arXiv:1909.13226. [PDF]

6. **Peize Sun**, Li Hu, Hongkai Zhang, Feng Xiong, Boxun Li, Gang Yu. Effective Positive Learning for Single-Stage Pedestrian Detection.

7. **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