

# Kai Zhao

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Google scholar: <http://kaizhao.net/scholar>

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## Research Interests

Machine Learning, Computer Vision, Reinforcement Learning.

## Experience

- **Panasonic Research Develop Center Singapore** **Singapore**  
*Research Intern* 2018.09 – 2018.12
  - Scene Recognition
- **Nankai University** **Tianjin, China**  
*Ph.D student* 2017 -
  - Ph.D researcher in the visual computing lab.
  - Object skeleton detection in natural images, saliency detection.
- **Tencent Youtu Lab** **Shanghai, China**  
*Research Intern* 2016.03 – 2016.06
  - Multi-label image classification and learning from web crawled data.
- **Shanghai University** **Shanghai, China**  
*Master Student* 2014 – 2017
  - Team member, lab of computer vision and pattern recognition;
  - Object skeleton/boundary detection in the wild, decision trees and deep learning;
  - 3 papers were accepted to top tier conferences/journal in the area of computer vision and machine learning (1 CVPR, 1 IEEE Trans on Image Processing, 1 NIPS).
  - I was NOT rated as excellent undergraduate student because the school consider only THE NUMBER OF JOURNAL PAPERS.
- **Shanghai University** **Shanghai, China**  
*Bachelor Student* 2010 – 2014
  - Leader of a student group aiming at building websites for school departments and companies (we made money from it);
  - Graduation project, object recognition based on skeleton-union tree was as rated excellent project;

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## Education

- **Nankai University** **Tianjin, China**  
*College of Computer Science and Control Engineering, Ph.D Computer Science* 2017 – 2020 (expected)
  - **Shanghai University** **Shanghai, China**  
*School of Communication and Information Engineering, M.S* 2014-2017
  - **Shanghai University** **Shanghai, China**  
*School of Communication and Information Engineering, B.S* 2010-2014
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## Core Technical Skills

**Theory:** Information theory, Statistics, Optimization, Machine learning, Neural networks.

**Programming:** C, C++, CUDA,  $\LaTeX$ , Python, shell script

**Language:** English: fluent (ILETS average 6.5, reading 8.5); Chinese-simplified (native).

## Publications

- *Kai Zhao, Shanghua Gao, Wenguan Wang, Ming-Ming Cheng*, Optimizing the F-measure for Threshold-free Salient Object Detection, **ICCV2019**
- *Kai Zhao, Jingyi Xu, Ming-Ming Cheng*, RegularFace: Deep Face Recognition via Exclusive Regularization, **CVPR2019**
- *Kai Zhao, Wei Shen, Shanghua Gao, Dandan Li, Ming-Ming Cheng*, Hi-Fi: Hierarchical Feature Integration for Skeleton Detection, **IJCAI2018**
- *Wei Shen, Kai Zhao, Yilu Guo, Alan Yuille*, Label Distribution Learning Forests, **NIPS2017**
- *Wei Shen, Kai Zhao, Yuan Jiang, Yan Wang, Xiang Bai, Alan Yuille*, DeepSkeleton: Learning Multi-task Scale-associated Deep Side Outputs for Object Skeleton Extraction in Natural Images, **TIP2017**
- *Wei Shen, Kai Zhao, Yuan Jiang, Yan Wang, Zhijiang Zhang, Xiang Bai* Object Skeleton Extraction in Natural Images by Fusing Scale-associated Deep Side Outputs, **CVPR2016**

See <http://kaizhao.net/research> for full publication list.

## Software

- [shu-thesis](#): a  $\LaTeX$  template for Shanghai Univ master thesis;
- [VLTools](#): a collection of useful, practical utilities, tools and extensions for computer vision and machine learning.