

# TETE XIAO

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<https://tetexiao.com>

## EDUCATION

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**University of California, Berkeley** (2019.8 - 2023.5)

Doctor of Philosophy, Berkeley Artificial Intelligence Research Lab

Advisor: Prof. Trevor Darrell

**Peking University** (2015.9 - 2019.6)

Bachelor of Science (summa cum laude), School of Electronics Engineering and Computer Science

## PUBLICATIONS

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1. \*Ilija Radosavovic, **\*Tete Xiao**, \*Bike Zhang, †Trevor Darrell, †Jitendra Malik, †Koushil Sreenath (\*, †: equal contribution, alphabetical order)  
*Learning Humanoid Locomotion with Transformers*,  
Tech report, 2023
2. \*Ilija Radosavovic, **\*Tete Xiao**, Stephen James, Pieter Abbeel, †Jitendra Malik, †Trevor Darrell (\*, †: equal contribution)  
*Real-World Robot Learning with Masked Visual Pre-training*,  
Conference on Robot Learning (**CoRL**), **Oral**, 2022
3. **\*Tete Xiao**, \*Ilija Radosavovic, †Trevor Darrell, †Jitendra Malik (\*, †: equal contribution)  
*Masked Visual Pre-training for Motor Control*,  
Tech report, 2022
4. **Tete Xiao**, Mannat Singh, Eric Mintun, Trevor Darrell, \*Piotr Dollár, and \*Ross Girshick (\*: equal contribution)  
*Early Convolutions Help Transformers See Better*,  
Thirty-fifth Conference on Neural Information Processing Systems (**NeurIPS**), 2021
5. **\*Tete Xiao**, \*Colorado Reed, Xiaolong Wang, Kurt Keutzer and Trevor Darrell (\*: equal contribution)  
*Region Similarity Representation Learning*,  
IEEE/CVF International Conference on Computer Vision (**ICCV**), 2021
6. Elad Levi, **Tete Xiao**, Xiaolong Wang, and Trevor Darrell  
*Reducing Class Collapse in Metric Learning with Easy Positive Sampling*,  
IEEE/CVF International Conference on Computer Vision (**ICCV**), 2021
7. **Tete Xiao**, Xiaolong Wang, Alexei A. Efros, and Trevor Darrell  
*What Should Not Be Contrastive in Contrastive Learning*,  
International Conference on Learning Representations (**ICLR**), 2021
8. Qiang Zhang, **Tete Xiao**, Alexei A. Efros, Lerrel Pinto, and Xiaolong Wang  
*Learning Cross-Domain Correspondence for Control with Dynamics Cycle-Consistency*,  
International Conference on Learning Representations (**ICLR**), **Oral**, 2021
9. Joanna Materzynska, **Tete Xiao**, Roei Herzig, Huijuan Xu, Xiaolong Wang, and Trevor Darrell  
*Something-Else: Compositional Action Recognition with Spatial-Temporal Interaction Networks*,  
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020
10. **Tete Xiao**, Quanfu Fan, Dan Gutfreund, Mathew Monfort, Aude Oliva and Bolei Zhou  
*Reasoning About Human-Object Interactions Through Dual Attention Networks*,  
IEEE/CVF International Conference on Computer Vision (**ICCV**), 2019
11. Bolei Zhou, Hang Zhao, Xavier Puig, **Tete Xiao**, Sanja Fidler, Adela Barriuso and Antonio Torralba  
*Semantic Understanding of Scenes through the ADE20K Dataset*,  
International Journal of Computer Vision (**IJCV**), 2019

12. **\*Tete Xiao**, \*Yingcheng Liu, \*Bolei Zhou, Yuning Jiang and Jian Sun (\*: equal contribution)  
*Unified Perceptual Parsing for Scene Understanding*,  
European Conference on Computer Vision (**ECCV**), 2018
13. \*Borui Jiang, \*Ruixuan Luo, \*Jiayuan Mao, **Tete Xiao**, Yuning Jiang and Jian Sun  
*Acquisition of Localization Confidence for Accurate Object Detection*,  
European Conference on Computer Vision (**ECCV**), **Oral**, 2018
14. \*Haoyue Shi, \*Jiayuan Mao, **\*Tete Xiao**, Yuning Jiang and Jian Sun (\*: equal contribution)  
*Learning Visually-Grounded Semantics from Contrastive Adversarial Samples*,  
International Conference on Computational Linguistics (**COLING**), 2018
15. \*Chao Peng, **\*Tete Xiao**, \*Zeming Li, Yuning Jiang, Xiangyu Zhang, Kai Jia, Gang Yu and Jian Sun (\*: equal contribution)  
*MegDet: A Large Batch Object Detector*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), **Spotlight**, 2018  
**Winner** of the COCO 2017 Detection Challenge
16. Xinlong Wang, **Tete Xiao**, Yuning Jiang, Shuai Shao, Jian Sun and Chunhua Shen  
*Repulsion Loss: Detecting Pedestrians in a Crowd*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2018
17. \*Jiayuan Mao, **\*Tete Xiao**, Yuning Jiang and Zhimin Cao (\*: equal contribution)  
*What Can Help Pedestrian Detection*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017

## ACADEMIC COMPETITIONS

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1. \*Chao Peng, **\*Tete Xiao**, \*Zeming Li, Yuning Jiang, Xiangyu Zhang, Kai Jia, Gang Yu and Jian Sun (\*: equal contribution)  
*Face++*,  
**Winner** of the COCO 2017 Detection Challenge.
2. **\*Tete Xiao**, \*Ruixuan Luo, \*Borui Jiang, Shuai Shao, Yuning Jiang, Yadong Mu, Jieqi Shi, Chi Zhang and Jian Sun (\*: equal contribution)  
*Face++ and Peking University*,  
**Winner** of the Places 2017 Instance Segmentation Challenge.
3. Yilun Chen\*, Zhicheng Wang\*, Yuxiang Peng, Zhiqiang Zhang, Gang Yu, Chao Peng, **Tete Xiao**, Zeming Li, Yuning Jiang, Xiangyu Zhang, Jian Sun  
*Face++*,  
**Winner** of the COCO 2017 Human Keypoint Challenge.
4. Ruixuan Luo\*, Borui Jiang\*, **Tete Xiao\***, Chao Peng\*, Yuning Jiang, Zeming Li, Xiangyu Zhang, Gang Yu and Jian Sun (\*: equal contribution)  
*Face++ and Peking University*,  
**First runner-up** of the COCO 2017 Instance Segmentation Challenge.

## EXPERIENCE

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- Visiting Researcher in AI, Facebook AI Research** (2020.12 - 2022.12)  
Mentors: Piotr Dollár and Ross Girshick
- Research Intern in AI, MIT-IBM Watson AI Lab** (2018.7 - 2018.12)  
Mentor: Dr. Quanfu Fan and Dr. Dan Gutfreund, IBM Research  
Collaborator: Dr. Bolei Zhou and Dr. Aude Oliva, MIT CSAIL
- Research Intern in Auto Driving** (2018.5 - 2018.7)  
Mentor: Dr. Shaoqing Ren, R&D Director and Co-founder, Momena AI
- Senior Research Intern in Computer Vision** (2015.12 - 2018.5)  
Mentor: Mr. Yuning Jiang, Lead Researcher, Megvii Research  
Supervisor: Dr. Jian Sun, Chief Scientist, Megvii Research

**OPEN-SOURCED PROJECTS**

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1. Semantic segmentation toolbox on PyTorch in conjunction with MIT CSAIL (~4.5k stars). <https://github.com/CSAILVision/semantic-segmentation-pytorch>
2. Precise RoI-Pooling, proposed in Acquisition of Localization Confidence for Accurate Object Detection (~700 stars). <https://github.com/vacancy/PreciseRoIPooling>
3. Unified Perceptual Parsing, proposed in Unified Perceptual Parsing for Scene Understanding (~200 stars). <https://github.com/CSAILVision/unifiedparsing>

**COMPETITIONS**

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1. Gold Medals, ACM International Collegiate Programming Contest (ACM-ICPC) Asia Regional, 2016.11 & 2017.11
2. Gold Medal, “Surpass Cup” Peking University Programming Contest, 2016.5
3. Bronze Medal, National Olympiad in Informatics (NOI), 2014.8
4. Champion, Shandong Province Team Selection Contest for NOI, 2014.5

**HONORS & AWARDS**

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1. Snap Research Scholarship 2019
2. China National Scholarship, Peking University
3. The Scholarship for the Outstanding Talented, Peking University
4. Founder Group Scholarship, Peking University
5. Schlumberger Scholarship, Peking University
6. Merit Student, Peking University

**ACADEMIC SERVICE & LEADERSHIP**

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1. Conference reviewer: CVPR’19-; ICCV’19-; ECCV’20-; AAAI’20-; NeurIPS’21-; ICRA’21- ICLR’21-
2. Journal reviewer: TPAMI; TIP; TCSVT
3. Teaching faculty: Practice in Programming (Spring 17-18), Artificial Intelligence and Computer Vision (Spring 18-19), Peking University
4. Assistant Coach of Team PKU at ACM/ICPC World Final 2017, Rapid City, U.S., where we ranked 7<sup>th</sup> worldwide and won a silver medal, the second best record of the university at that time.