

Education

- 2018–Present **Ph.D.**, *Virginia Tech.*
Computer Engineering, Vision and Learning Lab
Advisor: Jia-Bin Huang
- 2015–2017 **Master of Science**, *University of Michigan, Ann Arbor.*
Electrical and Computer Engineering
Advisor: Raj Rao Nadakuditi
- 2013–2015 **Bachelor of Science**, *Oregon State University.*
Electrical and Computer Engineering
Minor in Computer Science
Advisor: Raviv Raich

Work Experience

- Summer 2020 **Google, Mountain View**
Research Intern in the Android Camera Algorithm Team. Host: YiChang Shih
- Summer 2019 **Facebook, Seattle**
Research Intern in the Computational Photography Group. Host: Johannes Kopf

Publications

- ECCV 2020 **Flow-edge Guided Video Completion**
[\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Chen Gao, Ayush Saraf, Jia-Bin Huang, Johannes Kopf
Proceedings of European Conference on Computer Vision, 2020
- ECCV 2020 **DRG: Dual Relation Graph for Human-Object Interaction Detection**
[\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Chen Gao, Jiarui Xu, Yuliang Zou, Jia-Bin Huang
Proceedings of European Conference on Computer Vision, 2020
- ECCV 2020 **NAS-DIP: Learning Deep Image Prior with Neural Architecture Search**
[\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Yun-Chun Chen*, **Chen Gao***, Esther Robb, Jia-Bin Huang
Proceedings of European Conference on Computer Vision, 2020
- NeurIPS 2019 **Why Can't I Dance in the Mall? Learning to Mitigate Scene Bias in Action Recognition**
[\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Jinwoo Choi, **Chen Gao**, Joseph Messou, Jia-Bin Huang
In Proceedings of Neural Information Processing Systems (NeurIPS), 2019
- BMVC 2018 **iCAN: Instance-Centric Attention Network for Human-Object Interaction Detection**
[\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Chen Gao, Yuliang Zou, and Jia-Bin Huang
In Proceedings of the 29th British Machine Vision Conference (BMVC), 2018
- GlobalSIP 2017 **Augmented Robust PCA for Foreground-background Separation on Noisy, Moving Camera Video** [\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Chen Gao, Brian E. Moore, Raj Rao Nadakuditi
In Proceedings of the 5th IEEE Global Conference on Signal and Information Processing (GlobalSIP), 2017

IEEE TCI **Panoramic Robust PCA for Foreground-Background Separation on Noisy, Free-Motion Camera Video** [\[Paper\]](#) [\[Project page\]](#) [\[Code\]](#)
Chen Gao*, Brian E. Moore*, Raj Rao Nadakuditi
IEEE Transactions on Computational Imaging (TCI), 2019

Research Experience

2017–Present **Virginia Tech**, *Research Assistant*.
Human-object interaction detection
Learning deep image prior with neural architecture search
Detecting migrating birds at night

2020–Present **Google**, *Research Intern*.
Portrait NeRF from a single image

2019–2020 **Facebook**, *Research Intern*.
Flow-edge guided video completion

2016–2018 **University of Michigan, Ann Arbor**, *Research Assistant*.
Foreground/background separation

Academic Services

Conference Reviewer: BMVC 2019-2020, NeurIPS 2020, CVPR 2020, ACCV 2020, WACV 2020-2021

Journal Reviewer: IEEE Pattern Analysis and Machine Intelligence (TPAMI)

Teaching

2018 Teaching Assistant, ECE5554/4554 (Computer Vision)

2019 Teaching Assistant, ECE5424/5824 (Advanced Machine Learning)

Skills

Programming Languages: C, C++, Python, Matlab, Assembly Language

Libraries: TensorFlow, PyTorch, Caffe, OpenCV, CUDA