# Chen Gao
*Research Scientist*

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## ▬ Employment

**Meta** Reality Labs — May 2022 - Present
Research Scientist, 3D/4D Reconstruction

**Google** VisCam team — Jun 2021 - Sep 2021
Research Intern, Panoramic Video

**Google** Android Camera Algorithm team — Jun 2020 - Sep 2020
Research Intern, Portrait NeRF

**Facebook** Computational Photography team — Jun 2019 - Sep 2019
Research Intern, Video Completion

## ▬ Education

**Ph.D.** in Computer Engineering at Virginia Tech — 2018 - 2022
Advisor: Jia-Bin Huang

**M.Sc.** in Electrical and Computer Engineering at University of Michigan — 2015 - 2017
Advisor: Raj Rao Nadakuditi

**B.Sc.** in Electrical and Computer Engineering at Oregon State University — 2013 - 2015
Minor in Computer Science

## ▬ Product Impact

**Hyperscape** ⌂ — 2023 - 2026
Meta Reality Labs, An immersive, digital replica of the world

## ▬ Publications

[16] **Textured Gaussians for Enhanced 3D Scene Appearance Modeling**
CVPR 2025 ⌂
Brian Chao, Hung-Yu Tseng, Lorenzo Porzi, ***Chen Gao***, Tuotuo Li, Qinbo Li, Ayush Saraf, Jia-Bin Huang, Johannes Kopf, Gordon Wetzstein, Changil Kim

[15] **Reflection-Aware Neural Radiance Fields**
SIGGRAPH Asia 2024 ⌂
***Chen Gao***, Yipeng Wang, Changil Kim, Jia-Bin Huang, Johannes Kopf

[14] **Modeling Ambient Scene Dynamics for Free-view Synthesis**
SIGGRAPH 2024 ⌂
Meng-Li Shih, Jia-Bin Huang, Changil Kim, Rajvi Shah, Johannes Kopf, ***Chen Gao***

[13] **SpecNeRF: Gaussian Directional Encoding for Specular Reflections**
CVPR 2024 ⌂
Li Ma, Vasu Agrawal, Haithem Turki, Changil Kim, ***Chen Gao***, Pedro V. Sander, Michael Zollhöfer, Christian Richardt

[12] **OmnimatteRF: Robust Omnimatte with 3D Background Modeling**
ICCV 2023 ⌂
Geng Lin, ***Chen Gao***, Jia-Bin Huang, Changil Kim, Yipeng Wang, Matthias Zwicker, Ayush Saraf

[11] **Progressively Optimized Local Radiance Fields for Robust View Synthesis**
CVPR 2023 ⌂
Andreas Meuleman, Yu-Lun Liu, ***Chen Gao***, Jia-Bin Huang, Changil Kim, Min H. Kim, Johannes Kopf

[10] **Robust Dynamic Radiance Fields**
CVPR 2023 ⌂
Yu-Lun Liu, ***Chen Gao***, Andreas Meuleman, Hung-Yu Tseng, Ayush Saraf, Changil Kim, Yung-Yu Chuang, Johannes Kopf, Jia-Bin Huang

[9] **Portrait Neural Radiance Fields from a Single Image**
arXiv ⌂
***Chen Gao***, Yichang Shih, Wei-Sheng Lai, Chia-Kai Liang, Jia-Bin Huang

[8] **Dynamic View Synthesis from Dynamic Monocular Video**
ICCV 2021 ⌂
***Chen Gao***, Ayush Saraf, Johannes Kopf, Jia-Bin Huang

[7] **Flow-edge Guided Video Completion**
ECCV 2020 ⌂
***Chen Gao***, Ayush Saraf, Jia-Bin Huang, Johannes Kopf

[6] **DRG: Dual Relation Graph for Human-Object Interaction Detection**
ECCV 2020 ⌂
***Chen Gao***, Jiarui Xu, Yuliang Zou, Jia-Bin Huang

[5] **NAS-DIP: Learning Deep Image Prior with Neural Architecture Search**
ECCV 2020 ⌂
Yun-Chun Chen*, ***Chen Gao***\*, Esther Robb, Jia-Bin Huang

[4] **Why Can't I Dance in the Mall? Learning to Mitigate Scene Bias in Action Recognition**
NeurIPS 2019 ⌂
Jinwoo Choi, ***Chen Gao***, Joseph Messou, Jia-Bin Huang

[3] **iCAN: Instance-Centric Attention Network for Human-Object Interaction Detection**
BMVC 2018 ⌂
***Chen Gao***, Yuliang Zou, and Jia-Bin Huang

[2] **Augmented Robust PCA for Foreground-background Separation on Noisy, Moving Camera Video**
GlobalSIP 2017 ⌂
***Chen Gao***, Brian E. Moore, Raj Rao Nadakuditi

[1] **Panoramic Robust PCA for Foreground-Background Separation on Noisy, Free-Motion Camera Video**
TCI 2019 ⌂
***Chen Gao***\*, Brian E. Moore*, Raj Rao Nadakuditi