

Chenyang Lei

Curriculum Vitae

leichenyang7@gmail.com

chenyanglei.github.io

EDUCATION

Hong Kong University of Science and Technology

August 2018 - August 2022

PhD in Department of Computer Science and Engineering

Supervisor: Qifeng Chen

Zhejiang University

August 2014 - June 2018

Bachelor of Engineering

GPA Ranking: 5%

EXPERIENCE

Computer Science Department, Princeton University, New Jersey

Sep 2022 - Present

Research Scholar

Faculty Host: Felix Heide

Centre for Artificial Intelligence and Robotics (CAIR), Chinese Academy of Sciences, Hong Kong

Sep 2022 - Present

Assistant Professor

Nvidia, Beijing

May 2022 - Sep 2022

Research Intern

MSRA, Beijing

Apr 2021 - Apr 2022

Research Intern

PUBLICATIONS

Chenyang Lei is interested in computational photography and imaging, video processing and synthesis, and deep learning. (* indicates equal contribution, and † indicates corresponding authors.)

- Polarization Wavefront Lidars: Learning to Recover Large-Scale Scene Information from Polarized Wavefronts
Dominik Scheuble*, **Chenyang Lei***, Mario Bijelic, Seung-Hwan Baek, Felix Heide
CVPR, 2024
- Robust Depth Enhancement via Polarization Prompt Fusion Tuning
Kei IKEMURA*, Yiming Huang*, Felix Heide, Zhaoxiang Zhang, Qifeng Chen, **Chenyang Lei†**
CVPR, 2024
- Automatic Controllable Colorization by Imagination
Xiaoyan Cong, Yue Wu, Qifeng Chen, **Chenyang Lei†**
CVPR, 2024
- Neural Spline Fields for Burst Image Fusion and Layer Separation
Ilya Chugunov, David Shustin, Ruyu Yan, **Chenyang Lei**, Felix Heide
CVPR, 2024
- A Diffusion Model with State Estimation for Degradation-blind Inverse Imaging
Liya Ji*, Zhefan Rao*, Sinno Jialin Pan, **Chenyang Lei†**, Qifeng Chen†
AAAI, 2024

- Thin On-Sensor Nanophotonic Array Cameras
Praneeth Chakravarthula, Jipeng Sun, Xiao Li, **Chenyang Lei**, Gene Chou, Mario Bijelic, Johannes Froech, Arka Majumdar, Felix Heide
SIGGRAPH, 2023
- Robust Reflection Removal with Flash-only Cues in the Wild
Chenyang Lei*, Xudong Jiang* , Qifeng Chen
TPAMI, 2023
- Randomized Quantization for Data Agnostic Representation Learning
Huimin Wu*, **Chenyang Lei***, Xiao Sun, Peng-Shuai Wang, Qifeng Chen, Kwang-Ting Cheng, Stephen Lin, Zhirong Wu
ICCV, 2023
- FateZero: Fusing Attentions for Zero-shot Text-based Video Editing
Chenyang Qi, Xiaodong Cun, Yong Zhang, **Chenyang Lei**, Xintao Wang, Ying Shan, Qifeng Chen
ICCV, 2023
- Blind Video Deflickering by Neural Filtering with a Flawed Atlas
Chenyang Lei*, Xuanchi Ren*, Zhaoxiang Zhang, Qifeng Chen
CVPR, 2023
- High-fidelity 3D GAN Inversion by Pseudo-multi-view Optimization
Jiaxin Xie, Hao Ouyang, Jintan Piao, **Chenyang Lei**, Qifeng Chen
CVPR, 2023
- Deep Video Prior for Video Consistency and Propagation
Chenyang Lei, Yazhou Xing, Hao Ouyang, Qifeng Chen
TPAMI, 2022
- Shape from Polarization for Complex Scenes in the Wild
Chenyang Lei*, Chenyang Qi*, Jiaxin Xie*, Na Fan, Vladlen Koltun, Qifeng Chen
CVPR, 2022
- Robust Reflection Removal with Reflection-free Flash-only Cues
Chenyang Lei, Qifeng Chen
CVPR, 2021
- Neural Camera Simulators
Hao Ouyang*, Zifan Shi*, **Chenyang Lei**, Ka Lung Law, Qifeng Chen
CVPR, 2021
- Blind Video Temporal Consistency via Deep Video Prior
Chenyang Lei*, Yazhou Xing*, Qifeng Chen
NeurIPS, 2020
- Video Depth Estimation by Fusing Flow-to-Depth Proposals
Jiaxin Xie, **Chenyang Lei**, Zhuwen Li, Li Erran Li, Qifeng Chen
IROS, 2020
- Polarized Reflection Removal with Perfect Alignment in the Wild
Chenyang Lei, Xuhua Huang, Mengdi Zhang, Qiong Yan, Wenxiu Sun, Qifeng Chen
CVPR, 2020
- Fully Automatic Video Colorization with Self Regularization and Diversity
Chenyang Lei, Qifeng Chen
CVPR, 2019

AWARDS

- RedBird PhD Scholarship, HKUST, 2021, 2022
- SENG Academic Award for Continuing PhD students, HKUST, 2020
- National Scholarship (Ranking 1/81), 2017
- Outstanding Graduate (Zhejiang University), 2018
- Texas Instruments Scholarship, 2017
- First-Class Scholarship for Outstanding Merits, 2017
- Excellent Student Award, 2016, 2017

TEACHING ASSISTANT

- COMP 2011: Programming with C++
- COMP 3031: Principle of Programming Languages (Fall 2019)
- COMP 4901J: Deep Learning in Computer Vision (Spring 2019)

SERVICES

Program Committee/Reviewers: CVPR, ICCV, TPAMI, IJCV, ECCV, AAAI, TIP, TVCG, IJCAI, IROS