XIN HUANG

+86 15229069620 ⋄ xinhuang@mail.nwpu.edu.cn

EDUCATION

Northwestern Polytechnical University (NPU), China 09/2020 - Now
- PhD candidate in Computer Science. Advisor: Prof. Qing Wang

Northwestern Polytechnical University (NPU), China 09/2016 - 07/2020
- Bachelor of Engineering, Computer Science. Advisor: Prof. Qing Wang
- Outstanding Graduate (Top 6%)

INTERESTS

Neural Radiance Fields (NeRF); Computational Photography; Image Enhancement (HDR imaging; Tone-mapping; Deblurring); 3D Content Generation.

PUBLICATIONS

- HumanNorm: Learning Normal Diffusion Model for High-quality and Realistic
  3D Human Generation arXiv, 2023
  Xin Huang, Ruizhi Shao, Qi Zhang, Hongwen Zhang, Ying Feng, Yebin Liu, Qing Wang

- Local Implicit Ray Function for Generalizable Radiance Field Representation CVPR, 2023
  Xin Huang, Qi Zhang, Ying Feng, Xiaoyu Li, Xuan Wang, Qing Wang

- Inverting the Imaging Process by Learning an Implicit Camera Model CVPR, 2023
  Xin Huang, Qi Zhang, Ying Feng, Hongdong Li, Qing Wang

- HDR-NeRF: High Dynamic Range Neural Radiance Fields CVPR, 2022
  Xin Huang, Qi Zhang, Ying Feng, Hongdong Li, Xuan Wang, Qing Wang

- Stereo Unstructured Magnification: Multiple Homography Image for View Synthesis arXiv, 2022
  Qi Zhang*, **Xin Huang***, Ying Feng, Xue Wang, Hongdong Li, Qing Wang

- SA-AE for Any-to-any Relighting ECCV, Workshops, 2020
  Zhongyun Hu, **Xin Huang**, Yaning Li, Qing Wang

INTERNSHIP

Visual Computing Center @ Tencent AI Lab, China 08/2021 - 05/2023
- Topics: Neural Radiance Fields (NeRF); Imaging Processing.
- Mentor: Qi Zhang

Tsinghua University, China 06/2023 - 01/2024
- Topics: 3D Human Generation.
- Mentor: Yebin Liu

PROJECTS

- **Neural Layered Fusion for Light Field Reconstruction via Focal Stack** 07/2020 - 11/2020
  Light field reconstruction from four sparse views faces challenges on occlusions. To tackle this, we propose a method for dense view synthesis by constructing multi-plane images from focal stacks.

- **AIM 2020 Relighting Challenge: Any-to-any Relighting (First Place)** 05/2020 - 07/2020
  We present a novel automatic model self-attention auto-encoder for generating a relighting image from a source image to match the illumination setting of a guide image.

- **Dancing Team Leader - NPU Dancing Robot Research & Training Base** 07/2017 - 09/2019
  Goal: Presenting a 3-minute dance show using self-designed humanoid dancing robots.
  My main responsibility is designing and coding a software for the motion editing of robots.

HONORS & AWARDS

- **Outstanding Graduate Students (Top 6%)** in Northwestern Polytechnical University, 2020.
- **Champion** in China Robot Competition - Dancing Robots Project, 08/2019.
- **Champion** in China Robot Competition - Dancing Robots Project, 08/2018.
- **Meritorious Winner (Top 7.2%)** in International Mathematical Contest in Modeling (MCM), 02/2018
- **First Prize ($7,200)** in Face Recognition Hackathon, Shaanxi, China, 11/2017.
- **Outstanding Students** in Northwestern Polytechnical University, 2017 and 2019.

- **Outstanding Graduate Students (Top 6%)** in Northwestern Polytechnical University, 2020.
- **Champion** in China Robot Competition - Dancing Robots Project, 08/2019.
- **Meritorious Winner (Top 7.2%)** in International Mathematical Contest in Modeling (MCM), 02/2018
- **First Prize ($7,200)** in Face Recognition Hackathon, Shaanxi, China, 11/2017.