Youming Deng

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https://denghilbert.github.io

Education

Cornell University — Ithaca, USA
Ph.D. in Computer Science — 2023 - present
- Advisor: Steve Marschner
- Research area: Graphics and 3D Vision

Wuhan University — Wuhan, China
B.E. in Information and Digital Technology — 2019 - 2023
- Advisor: Yansheng Li

Publications

1. **Youming Deng**, Wenqi Xian, Guandao Yang, Leonidas Guibas, Gordon Wetzstein, Steve Marschner, Paul Debevec. Self-Calibrating Gaussian Splatting for Large Field-of-View Reconstruction. In *ICCV*, 2025.
2. Yansheng Li, Linlin Wang, Tingzhu Wang, Xue Yang, Junwei Luo, Qi Wang, **Youming Deng**, Wenbin Wang, Xian Sun, Haifeng Li, Bo Dang, Yongjun Zhang, Yi Yu, Junchi Yan. Star: A first-ever dataset and a large-scale benchmark for scene graph generation in large-size satellite imagery. *TPAMI*, 2024.
3. **Youming Deng**, Xueting Li, Sifei Liu, Ming-Hsuan Yang. Physics-based Indirect Illumination for Inverse Rendering. In *3DV*, 2024.
4. **Youming Deng**, Yansheng Li, Yongjun Zhang, Xiang Xiang, Jian Wang, Jingdong Chen, Jiayi Ma. Hierarchical Memory Learning for Fine-Grained Scene Graph Generation. In *ECCV*, 2022.

Research

Research Assistant at Cornell | Ithaca, USA — 2023.08 - Present
- Advisor: Steve Marschner and Paul Debevec
- Project: self-calibration pipeline for large field of view camera reconstruction

Research Engineer at EPFL | Lausanne, Switzerland — 2023.04 - 2023.08
- Advisor: Wenzel Jakob
- Project: conversion support between Blender and Mitsuba3 with color ramping

Visiting Student at UC Merced | Remote — 2022.04 - 2023.08
- Advisor: Ming-Hsuan Yang
- Project: inverse rendering pipeline for non-differentiability lighting, material estimation, and accurate surface reconstruction

Research Assistant at Wuhan University | Wuhan, China — 2021.06 - 2022.04
- Advisor: Yansheng Li
- Project: coarse-to-fine training framework for Scene Graph Generation

Internship

Student Researcher at Google | Los Angeles, USA — 2025.05 - Present
- Mentor: Lucy Chai
- Project: efficient and robust feed-forward structure-from-motition, general novel view synthesis pipeline from uncalibrated imaginary

Skills

Languages: Chinese, English

Programming: `Python`, `C++`, `CUDA`

Framework: `Pytorch`, `Jax`, `Mitsuba`

Academic Services

Reviewers for SIGGRAPH, SIGGRAPH Asia
CVPR, ECCV, ICCV

Invited Talks World Lab
2nd Workshop on Neural Fields Beyond Conventional Cameras