SHENGYU HUANG

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EDUCATION

ETH Zurich, Switzerland   *Oct. 2020 - present*
Ph.D. student with Prof. Konrad Schindler and Prof. Andreas Wieser
ETH Zurich, Switzerland   *Sep. 2018 - Aug. 2020*
M.Sc. in Science ETH in Geomatik   GPA: 5.60/6.00
Tongji University, China   *Sep. 2014 - Jun. 2018*
B.Eng. in Surveying and Mapping Engineering   GPA: 4.61/5.00

PUBLICATIONS

H. Wu, X. Zuo, S. Leutenegger, Or Litany, K. Schindle, **S. Huang** "Dynamic LiDAR Re-simulation using Compositional Neural Fields." CVPR, 2024.

L. Zhu, **S. Huang**, K. Schindler, I. Armeni. "Living Scenes: Multi-object Relocalization and Reconstruction in Changing 3D Environments." CVPR, 2024.

B. Ke, A. Obukhov, **S. Huang**, N. Metzger, R. Daudt, K. Schindler. "Repurposing Diffusion-Based Image Generators for Monocular Depth Estimation." CVPR, 2024.

Y. Jia, L. Hoyer, **S. Huang**, T. Wang, L. Gool, K. Schindler, A. Obukhov. "DGInStyle: Domain-Generalizable Semantic Segmentation with Image Diffusion Models and Stylized Semantic Control." arxiv, 2024.

S. Huang, Z. Gojcic, Z. Wang, F. William, Y. Kasten, S. Fidler, K. Schindler, O. Litany "Neural LiDAR Fields for Novel View Synthesis." ICCV, 2023.

Z. Wang, T. Shen, J. Gao, **S. Huang**, J. Munkberg, J. Hasselgren, Z. Gojcic, W. Chen, S. Fidler "Neural Fields meet Explicit Geometric Representations for Inverse Rendering of Urban Scenes." CVPR, 2023.

L. Zhu, Y. Jia, **S. Huang**, N. Meyer, A. Wieser, K. Schindler, J. Aaron "DeFlow: Self-supervised 3D Motion Estimation of Debris Flow." CVPR Workshop, 2023. (Best Paper Award)

C. Stucker, B. Ke, Y. Yue, **S. Huang**, I. Armeni, K. Schindler "ImpliCity: City Modeling from Satellite Images with Deep Implicit Occupancy Fields." ISPRS Congress, 2022. (Best Young Author Award)

S. Huang, Z. Gojcic, J. Huang, A. Wieser, K. Schindler "Dynamic 3D Scene Analysis by Point Cloud Accumulation." ECCV, 2022.

S. Huang*, Z. Gojcic*, M. Usvyatsov, A. Wieser, K. Schindler. "PREDATOR: Registration of 3D Point Clouds with Low Overlap." CVPR, 2021. (Oral)

S. Huang, M. Usvyatsov, K. Schindler. "Indoor Scene Recognition in 3D." IROS, 2020.

T. Sun, Y. Hao, **S. Huang**, S. Savarese, K. Schindler, M. Pollefeys, I. Armeni "Nothing stands still: A spatiotemporal benchmark on 3d point cloud registration under large geometric and temporal change." arxiv, 2023

INTERNSHIP

Google, Germany   *July 2023 - Dec. 2023*
Student Researcher

· Project X supervised by Dr. Federico Tombari

NVIDIA, Switzerland   *April. 2022 - Dec. 2022*
Research Scientist Intern

· Physics-based neural simulation and inverse rendering supervised by Prof. Sanja Fidler

AWARDS

Best Paper Award, CVPR Photogrammetric Computer Vision Workshop	2023
Best Young Author Award, ISPRS Congress	2022
Geosuisse prize, ETH Zurich	2020
Outstanding Graduate, Tongji University	2018
Excellent Student Scholarship, the 2nd Place, Tongji University	*2015/2016/2017*
Chinese High School Mathematics Contest, 1st Place, Provincial Level	*2013*

SKILLS & LANGUAGES

Programming	C++, Python, PyTorch, Tensorflow, OpenCV, Java, Matlab, C#, Lisp
Language	Mandarin(Native); English(Proficient); German(Elementary)

REVIEWER

CVPR'21 & 22 & 23 & 24, ICCV'21 & 23, ECCV'22, 3DV'22 & 23 & 24, IROS'20 & 21, RA-L, T-PAMI, IJCV, ISPRS P&RS

REFERENCE

Prof. Konrad Schindler, Prof. Or Litany, Prof. Iro Armeni