SHENGYU HUANG

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EDUCATION

ETH Zurich, Switzerland *Oct. 2020 - present*
Ph.D. student in 3D Vision 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

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.

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.

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)

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

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)

H. Wu, H. Yang, S. Huang *et al.* "Semantic Classification of Point Clouds for Indoor Components using few labeled samples." Remote Sensing 12 (14), 2181.

H. Xie, A. Zhao, S. Huang *et al.* "Unsupervised Hyperspectral Remote Sensing Image Clustering Based on Adaptive Density." IEEE Geoscience and Remote Sensing Letters 15 (4), 632-636.

INTERNSHIP

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

· Project X supervised by Federico Tombari

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

· Physics-based neural simulation and inverse rendering supervised by 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, ICCV'21 &23, ECCV'22, IROS'20 & 21, 3DV'22, RA-L, T-PAMI, IJCV, ISPRS P&RS

REFERENCE

Prof. Dr. Konrad Schindler, Prof. Dr. Or Litany