XIANLIANG HUANG

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PUBLICATIONS

[1] **Xianliang Huang,** Jiawen Li, Yanjin Chen, Feng Han, Qinghuo Liu. Hybrid Electromagnetic Inversion of Irregular Scatterers Embedded in layered Media by VBIM and MET. in IEEE Transactions on Antennas and Propagation, vol. 68, no. 12, pp. 8238-8243, Dec. 2020. doi: 10.1109/TAP.2020.2985156.

[2] **Xianliang Huang,** Jiawen Li, Jianliang Zhuo, Feng Han, Qinghuo Liu. Fast and Reliable Reconstruction of 3-D Anisotropic Objects Buried in Layered Media by Cascaded Inverse Solvers. in IEEE Geoscience and Remote Sensing Letters, doi: 10.1109/LGRS.2021.3076433.

[3] **Xianliang Huang,** Yining Lang, Ying Guo, Yuan He, Hui Xue, Li Zhao, Shuigeng Zhou. DR-Net: A Multi-View Face Synthesis Network Driven by Dual Representation.IEEE International Conference on Multimedia and Expo (Oral, ICME), Brisbane, Australia, 2023, pp. 1751-1756, doi: 10.1109/ICME55011.2023.00301.

[4] **Xianliang Huang,** Jiajie Gou, Shuhang Chen, Zhizhou Zhong, Jihong Guan, Shuigeng Zhou. IDDR-NGP: Incorporating Detectors for Distractor Removal with Instant Neural Radiance Field. Proceedings of the 31st ACM International Conference on Multimedia (Oral, ACM MM),1343–1351.

[5] **Xianliang Huang**, Zhizhou Zhong, Shuhang Chen, Yi Xu, Jihong Guan, Shuigeng Zhou. DeMask-NeRF: Neural Radiance Fields for Masked Image Restoration. Submit to IEEE Transactions on Neural Networks and Learning Systems (TNNLS) under review.

[6] **Xianliang Huang**, Shuhang Chen, Zhizhou Zhong, Jiajie Gou, Jihong Guan, Shuigeng Zhou. Hi-NeRF: Hybridizing 2D Inpainting with Neural Radiance Fields for 3D Object Removal. Submit to IEEE Transactions on Multimedia (TMM) under review.

[7] **Xianliang Huang,** Shuhang Chen, Jihong Guan, Shuigeng Zhou. Accurate Anthropometric Measurement Extraction with Focused Human Body Model. Submit to 39st Association for the Advancement of Artificial Intelligence under review.

[8] Jiajie Gou, **Xianliang Huang**, Jihong Guan, Shuigeng Zhou. DR-GS: Towards Real-Time Distractor Removal with Gaussian Splatting. Submit to 39st Association for the Advancement of Artificial Intelligence under review.

EDUCATION

Nanchang University (NCU) **Jiangxi, China**
Bachelor of Mathematics and Applied Mathematics Sept. 2014 – Jun. 2018
Xiamen University (XMU) **Fujian, China**
Master of Radio Physics Sept. 2018 – Jun. 2021
Fudan University (FDU) **Shanghai, China**
Doctor of Electronic Information Sept. 2021 – now

- **Honors:** First Prize of the Ninth National Student Mathematics Competition (Provincial top 5%); Second Prize Scholarship of Nanchang University; Second Prize in Asia-Pacific Mathematical Modelling Competition;Triple-A student of Xiamen University;Second prize for two tracks in the Fujian Postgraduate Artificial Intelligence Competition.

INTERESTS RESEARCH

My research interests are at Computer Vision, Computer Graphics in 3D face and scenes reconstruction. The main research is based on neural rendering technique(NeRF, Instant-NGP, 3DGS) to restore 3D scenes from contaminated images. On the other hand, we study the generation of multi-view faces based on geometric and learning information, using a network of regional self-attentive mechanisms.

PROJECT EXPERIENCE

Xiamen University (XMU) **Fujian, China**

- **Project1:** Fast calculation of multi-parameter scattering of electromagnetic signals from airborne

composite field sources.

- **Project2:** Joint inversion methods and imaging techniques for electromagnetic fields.

Fudan University (FDU) **Shanghai, China**

- **Project3:** Enterprise financial fraud identification technology and application based on multi-source data fusion.
- **Project4:** Body measurement based on scaling-up human body model.

Shenshan Technology Corporation **Beijing, China**

Algorithm Researcher Internship Jul. 2021-Sept.2021

Main work:

- Research on the application of 3D digital human technology in virtual anchor generation, mainly using generative adversarial network combined with classical face reconstruction algorithm 3DMM and 3DDFA to achieve 3D face reconstruction and multi-view face generation.

Hikvision Company **Hangzhou,China**

Algorithm Engineer Internship Apr. 2024- Now

Main work:

- (1) Parsing the open-source datasets; (2) Deploying the EVA-CLIP model on the server and providing interface documentation for testing and external use; (3) Training and fine-tuning Fuhan's target detection framework; (4) Performing data augmentation and enhancement, and constructing labeled semantic maps.

SKILLS, ACTIVITIES & INTERESTS

Languages: Mandarin (native language); English (fluent); Hokkien (fluent)

Technical Skills: Python; MATLAB; C; C++; FORTRAN; MS OFFICE; SHELL; LATEX