Xindi Yang

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Education

Beijing Jiaotong University expected July 2024
Master of Computer Science and Technology *Supervised by Prof. Yi Liu*
- GPA: 3.40/4.0

Beijing Jiaotong University July 2020
Bachelor of Computer Science and Technology
- GPA: 3.80/4.0 (10th/219)

Publications & Manuscripts

- **Xindi Yang***, Zeke Xie*, Yujie Yang, Qi Sun, Yixiang Jiang, Haoran Wang, Yunfeng Cai and Mingming Sun, "S3IM: Stochastic Structural SIMilarity and Its Unreasonable Effectiveness for Neural Fields", **ICCV** 2023
- **Xindi Yang**, Zeke Xie, Xiong Zhou, Boyu Liu, Buhua Liu, Yi Liu, Haoran Wang, Yunfeng Cai and Mingming Sun, "Neural Field Classifiers via Target Encoding and Classification Loss", **ICLR** 2024 under review
- Xinyu Yang, Runhan Li, **Xindi Yang**, Yong Zhou, Yi Liu and Jing-Dong J. Han, "Coordinate-Wise Monotonic Transformations for PrivacyPreserving Facial Age Estimation", **Science China Life Sciences** under review

Experience

Research Intern May 2022 – Present
Cognitive Computing Lab, Baidu Research *Supervised by Dr. Zeke Xie*
- **Autonomous Driving Scene Simulation**
  - Studying learning-based methods as alternative to traditional CG-based methods in simulations, improving both visual and perceptional metric significantly.
- **Neural Fields**
  - Design a non-local multiplex training paradigm for NeRF, leveraging non-loacal patch to extract the global structural information. One paper published.
  - Propose classifier-based architecture to provide more stable supervised information in learning process of neural fields, which enhance the quality of neural fields impressively. One paper is under review.

Visiting Student October 2020 – January 2022
Han lab, Peking University *Supervised by Prof. Jing-Dong Jackie Han*
- **Aging Research in 3D Human Face**
  - Analyzed the relation between aging human faces and proposed to leverage the invariant perceptional feature in aging human face to protect the privacy. One paper is under review.
  - Developed a software to visualize aging process, serving thousands of people in TangShan.

Projects

S3IM | *Project Page* August, 2023
- Unreasonable improvement in the quality of reconstruction(e.g. **198% F-score** gain in NeUS over eight complex scene). Github stars **150+**. SDFStudio has supported our S3IM method;
- **Academic Impact**: S3IM is promoted by more than 5 media and forums, such as Zhihu and CVhub

Honors & Awards

- 2023, **Outstanding Intern** of the Year, Baidu Research
- 2016-2022, Model Student of Academic Records of Beijing Jiaotong University
- 2018, National Contemporary Undergraduate Mathematical Contest IN Modeling in China, **First Prize** in Beijing

Miscellaneous

Programming: Python, PyTorch, C++, Matlab, Bash, MySQL, LaTeX
Developer Tools: git, shell, docker