Xindi Yang

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Education

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

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

Publications & Manuscripts

- Zeke Xie*, **Xindi Yang***, Yujie Yang, Qi Sun, Yixiang Jiang, Haoran Wang, Yunfeng Cai, Mingming Sun, "S3IM: Stochastic Structural SIMilarity and Its Unreasonable Effectiveness for Neural Fields", **ICCV** 2023 (*equal contribution).
- **Xindi Yang**, Zeke Xie, Xiong Zhou, Boyu Liu, Buhua Liu, Yi Liu, Haoran Wang, Yunfeng Cai, 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, 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**
  - Utilizing 3D vision techniques and generative models to develop realistic and controllable street simulations.
- **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. One paper is under review.

Visiting Student October 2020 – January 2022
Han lab, Peking University *Supervised by Prof. Jing-Dong J. 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