Sitong Wang

+86-180-0159-3306 | wangsitongnj@163.com | https://sitongwang-nj.github.io

South China University of Technology, Guangzhou, China

Objective

Seeking 2026-fall Master or Ph.D. student position in Computer Vision to leverage my expertise in 3D Reconstruction and Generation. Aiming to contribute to innovative projects at the intersection of 3D perception and interaction, reconstruction and generation and practical problem-solving in fields such as autoamtic driving, virtual reality, augmented reality and digital human.

Experience

- **South China University of Technology [🌐]** *10/2024 - present*
  Undergraduate Intern Guangzhou, China
  - We propose TraGraph-GS, a novel view synthesis method based on trajectory graphs that is capable of high-quality rendering for arbitrarily large-scale scenes. The paper is currently under review at IEEE Transactions on Pattern Analysis and Machine Intelligence and available HERE.

Education

- **South China University of Technology** *09/2022 - present*
  Undergraduate major in Artificial Intelligence, School of Future Technology, Guangzhou, China
  - GPA: 3.79/4.00
  - Core Curriculums: Linear Algebra (95), Complex Analysis (93), Introduction to Artificial Intelligence (98), Data Structure (92), Machine Learing (91), Discrete Mathematics (92), Digital Image Processing (95), Digital Signal Processing (90), Digital System Designing (92), Reinforcement Learning (94).

Projects

- **MetaSCUT: Large-Scale Scene Simulation based on 3D-GS and Universal Physics Engine** *12/2024 - 01/2025*
  Keywords: 3D Scene Reconstruction, Physical Simulation
  - Develop the "MetaSCUT" framework for physical simulation in large-scale scene based on 3D Gaussian Splatting and Universal Physics Engine.
  - Implement high-quality reconstruction of SCUT-GZIC scenes by using self-provided aerial datasets and 3D Gaussian Splatting techniques.
  - Integrate Blender for dynamic interaction simulation, including vehicle physics and robotic arm control.
  - Achieve efficient mesh reconstruction and rendered images with Surface-Aligned Gaussian Splatting (SuGaR), outperforming traditional methods in terms of detail and accuracy.
  - Anticipated further development and work is scheduled to mainly focus on enhancing the simulation accuracy and complexity of our virtual campus by leveraging the Genesis physics engine.
  - The code of "MetaSCUT" project page is available here: [GitHub]

Skills

- **Programming:** Python, C++, Matlab, VHDL, Html
- **Writting:** Latex, Markdown, Word, Typst

Honors and Awards

- **The Third-prize Scholarship** *12/2024, 12/2023*
  South China University of Technology
- **First-prize in Guangdong Province of Contemporary Undergraduate Mathematical Contest in Modeling** *12/2024*
  China Society for Industrial and Applied Mathematics
- **Second-prize in the southern division of MathorCup Mathematics Application Challenge** *04/2024*
  Chinese Society of Optimization, Overall Planning and Economic Mathematics
- **Finalist of Mathematical Contest in Modeling (MCM) and Interdisciplinary Contest in Modeling (ICM)** *02/2024*
  Consortium for Mathematics and its Applications (COMAP)

Certifications

- **South China University of technology - Baidu pinecone talent training elite class: Graduated Student** *09/2024*
- **College English Test Band6: 542** *12/2023*
- **College English Test Band4: 613** *12/2022*

COLLABORATORS

1. **Qi Liu**
   Professor and Doctoral supervisor, School of Future Technology, South China University of Technology
   IEEE Senior Member, Member of the Youth Working Committee of China Society of Image and Graphics
   Email: drliuqi@scut.edu.cn
   Homepage: https://drliuqi.github.io/
   Relationship: Research Mentor
2. **Xiaohan Zhang**
   Doctoral student of Prof. Qi Liu, Electrical and Computer Engineering, South China University of Technology
   Email: ftzhangxiaohan@mail.scut.edu.cn
   Relationship: Collaborator