

ZHEYUN WAN

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EDUCATION

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| Nanchang University (GPA: 3.49/4.0) Supervisor: Associate Professor. Jingbo Wei Master in Computer Science | Nanchang, China Sep 2020 – July 2023 |
| Jiangxi University of Finance and Economics (GPA: 2.6/4.0) B.S. in Software Engineering | Nanchang, China Sep 2015 – July 2019 |

PUBLICATIONS

* indicates equal contribution

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|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Neurocomputing] | ShapeGPT and PointPainter for fast zero shot text-to-3d point cloud generation Zeyun Wan* , Shichao Fan*, Huan Zhao, Jiawei Liu, Ying Chen Neurocomputing, IF: 5.5, 2025 |
| [MDPI] | Learning Contours for Point Cloud Completion Jiabo Xu, Zeyun Wan , Jingbo Wei MDPI Remote Sensing, IF: 5.5, 2023 |
| [IEEE] | GLORN: Strong Generalization Fully Convolutional Network for Low-Overlap Point Cloud Registration Jiabo Xu, Yukun Huang, ZeYun Wan , Jingbo Wei IEEE Transactions on Geoscience and Remote Sensing, IF: 7.5, 2022 |

RESEARCH INTERESTS

3D Reconstruction, Point-Cloud Processing, Generative AI

RESEARCH EXPERIENCE

- School of Computer and Information Engineering, Nanchang Institute of Technology* *Nanchang, China*
Fast zero shot text-to-3d point cloud generation using GPT March 2024 – Aug 2024
Developed the two-stage ShapeGPT text-to-3D pipeline: Stage 1 uses a GPT-style transformer to generate coarse voxel priors directly from raw text prompts; Stage 2 employs a lightweight PointPainter refinement network to convert those voxels into detailed point clouds
 - Designed and implemented the ShapeGPT architecture to encode text prompts into 3D shape priors, reducing inference time compared to prior methods.
 - Implemented the PointPainter module to “paint” geometric detail onto the ShapeGPT voxels, boosting reconstruction fidelity and achieving state-of-the-art improvements on standard benchmarks (e.g. ShapeNet), with up to a 20% reduction in error versus previous zero-shot methods.



- *School of Computer and Information Engineering, Nanchang Institute of Technology* *Nanchang, China*

Designing a soft points registration network

1. Developed a RANSAC-free point cloud registration framework that leverages self-attention and cross-attention to generate soft correspondences without relying on traditional feature matching, enabling robust geometric structure perception between source and target point clouds.
2. Achieved state-of-the-art performance on benchmark datasets (3DMatch, 3DLoMatch, KITTI) with significantly improved computational efficiency by directly estimating transformation parameters from attention-weighted soft point sets.

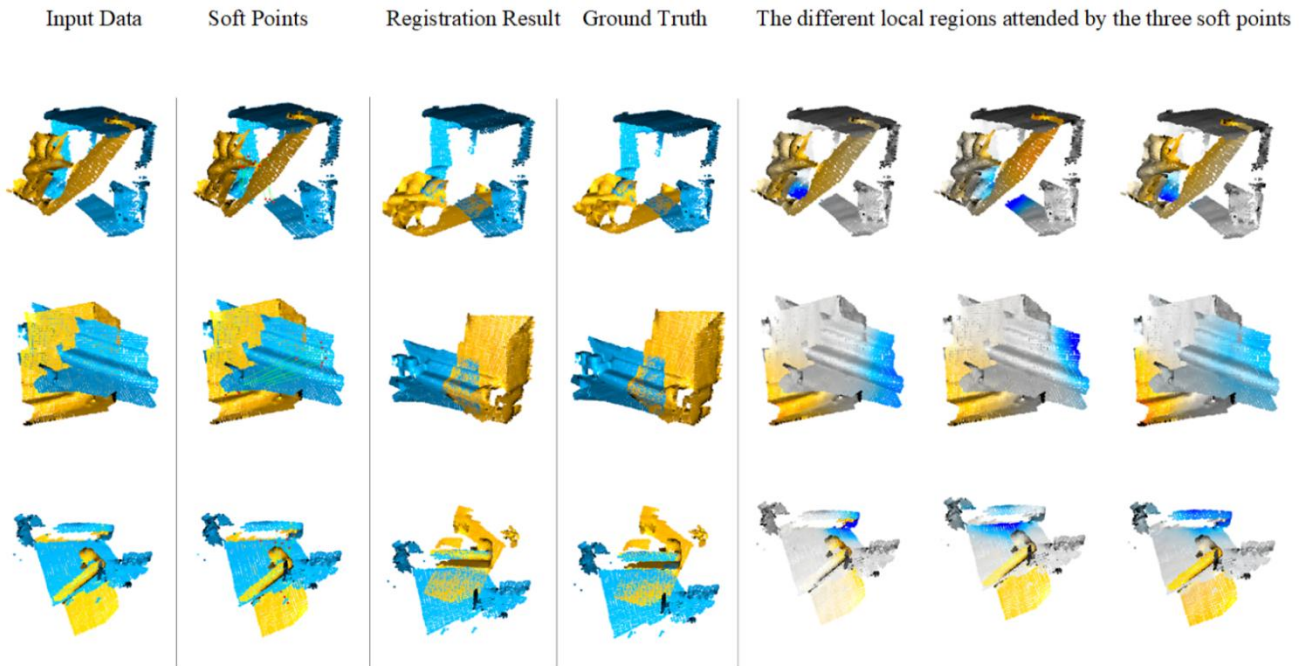
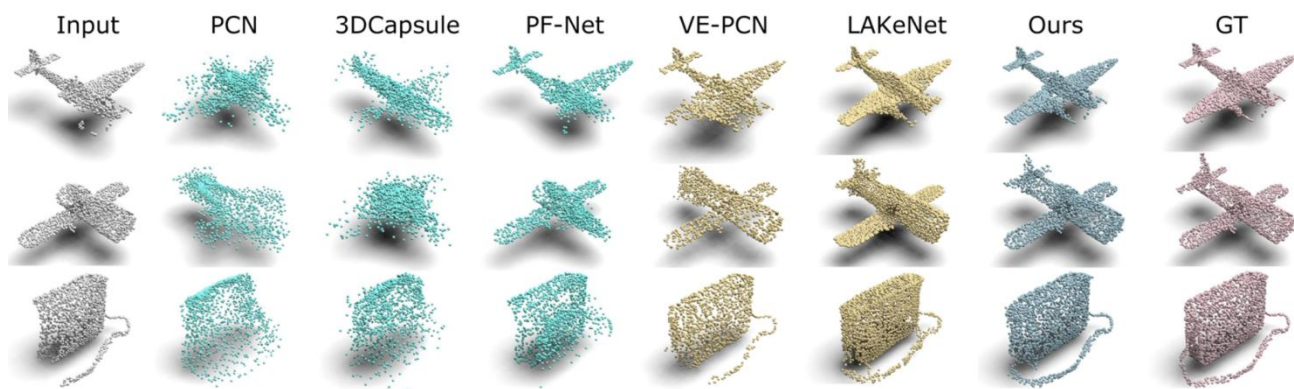


Fig. 2. Example results on 3DLoMatch dataset.

Learning Contours for Point Cloud Completion

May 2022 – July 2023

- Designed a novel end-to-end “point → voxels → points” completion network by integrating transformer-based encoder and decoder modules, improving model compactness over VE-PCN by eliminating extra multi-scale branches while preserving rich structural priors for completion.
- Incorporated an implicit voxel-validity classifier with a contour-learning loss to capture salient edges and irregular surfaces, yielding more accurate detail reconstruction on ShapeNet and KITTI benchmarks compared to standard transformer-only decoders.



INDUSTRIAL EXPERIENCE

Beijing Shuimu Imprint Intelligent Technologies Co., Ltd.

June 2024 – April 2025

Workplace : Tsinghua University, Beijing.

Position: Java Engineer & DevOps Engineer

- Architected and implemented an automated thesis-formatting system using Java, SpringBoot, and the Snowy framework to manage a front-end/back-end-separated desktop application.
- Integrated Aspose.Words API for Java to generate standardized document components: font/paragraph/citations styles for various sections, cover pages, headers/footers, and reference section, eliminating manual formatting errors and enforcing university style for each thesis sections.

Beijing Infosec Technologies Co., Ltd.

July 2023 – May 2024

Position: Java Engineer & DevOps Engineer

- Independently designed and deployed advanced firewall configurations across multi-NIC servers for a high-availability digital-signature service: automated port and IP policy updates, one-click default-policy switching, and import/export backup-restore workflows to ensure rapid recovery and policy consistency
- Collaborated with security and academic stakeholders to define threat models and compliance requirements, delivering customized automation scripts that accelerated policy audits by 70%

ACADEMIC TECHNICAL SKILLS

- Programming Language: Python
- Frameworks & Libraries: PyTorch, Open3D, Open CV, Hugging Face Transformers and Diffusers
- Tools: Git

LANGUAGE SKILLS

- English: IELTS 6.5 (CEFR level B2)