

Xinze Li

(86) 13142124812

(852) 59586645

t330026083@mail.bnbu.edu.cn

Education

Zhuhai, Guangdong, China **Beijing Normal University–Hong Kong Baptist University** **Fall 2023 – Summer 2027 (expected)**

- B.Sc. in Computer Science and Technology, selected for the Math+N Experimental Program
- **cGPA:** 3.86 / 4.00
- **Selected Coursework:** Machine Learning, Data Structures and Algorithms, Algorithm Design and Analysis, Theory of Computation, Introduction to Bioinformatics, 3D Computer Vision, Deep Learning for Computer Vision
- **Scholarships and Honors:**
 - Freshman Discipline Excellence Scholarship (Informatics): Academic Years 2023–2024, 2024–2025 (renewed)
 - President Tao Tang Liberal Arts Scholarship: Sole First-Prize Recipient in the Inaugural Year
 - First-Class Honors Scholarship: Academic Years 2023–2024, 2024–2025
 - Curiosity Scholarship: Industry-sponsored, supporting research on accelerating 3DGS rendering

Hong Kong SAR, China **Hong Kong Baptist University** **Fall 2024**

- One-semester exchange program
- **Selected Coursework:** Data Communications and Networking, Computer Organization, Fundamentals of Traditional Chinese Medicine, Cantonese

Research Experience

Interdisciplinary Studies **Beijing Normal University–Hong Kong Baptist University** **Fall 2023 – Summer 2025**

- **Medical Image Segmentation**
 - Li, X., Huang, R., Wu, Z., Yang, B., Fan, W., Zhu, C., & Su, W. (2024, December). Leveraging CORAL-Correlation Consistency Network for Semi-Supervised Left Atrium MRI Segmentation. In *Proceedings of the 2024 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)* (pp. 3434–3438). IEEE. (CCF-B)
 - Zhu, C., Zhang, R., Xiao, Y., Zou, B., Yang, Z., Li, J., & Li, X. (2025). Multi-perspective feature compensation enhanced network for medical image segmentation. *Biomedical Signal Processing and Control*, 100, 107099. (JCR Q1)
- **Bioinformatics**
 - Wang, X., Li, X., Guan, Y., Chen, F., Chen, P., Yang, F., & Chen, J. (2025, December). SyAGram: Dual-Component Framework for Anti-Gram-Negative AMP Classification and Generation. In *Proceedings of the 2025 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*. IEEE. (CCF-B)
 - Guan, Y., Wang, X., Li, X., Liu, Y., Yang, A., & Chen, J. (2025, December). Accurate Protein–Ligand Affinity Prediction by Modeling Molecular Interactions. In *Proceedings of the 2025 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*. IEEE. (CCF-B)

3D Gaussian Splatting **Beijing Normal University–Hong Kong Baptist University** **Spring 2025**

- Submitted to ICIP; currently under review.
- Proposed **QuadBox**, a novel tile culling method that encloses projected Gaussians using four axis-aligned bounding boxes, enabling more precise and discrete Gaussian–tile intersection tests.
- Achieved a $1.85\times$ rendering speedup on public benchmarks while maintaining or slightly improving visual fidelity, advancing the efficiency of real-time 3DGS-based novel view synthesis.
- Supervisors: Dr. Wentao Cheng & Prof. Weifeng Su.

Feed-Forward 3D Reconstruction **Beijing Normal University–Hong Kong Baptist University** **Fall 2025**

- Accepted by ICME 2026: **Li, X.**, Chen P., Wang Y., Su W., Cheng W. S-VGGT: Structure-Aware Subscene Decomposition for Scalable 3D Foundation Models.
- Proposed a training-free S-VGGT method that performs structured frame-level scene grouping, significantly accelerating the VGGT inference pipeline while achieving state-of-the-art accuracy and speed across multiple datasets.
- The method is fully orthogonal to existing Token Merging techniques, and their combination yields substantial dual performance gains.
- Supervisors: Dr. Wentao Cheng & Prof. Weifeng Su.

Image Matching **Beijing Normal University–Hong Kong Baptist University** **Fall 2025–Now**

- Three papers submitted to ICME, ECCV and ACM MM;
- Supervisors: Dr. Wentao Cheng.

Competitions

National Olympiad in Informatics **Changjun High School** **Fall 2020 – Summer 2023**

- **National Olympiad in Informatics in Provinces (NOIp), First Prize**, Hunan
- **CSP-S 2020, First Prize**, Hunan

Academic Service

Research Assistant **Central South University** **Fall 2024 – Fall 2027**

- Research focus: Medical image analysis
- Affiliation: Hunan Provincial International Cooperation Base for Machine Vision and Medical Image Processing, Central South University

Teaching Assistant **Beijing Normal University–Hong Kong Baptist University** **Fall 2025**

- Course: Fundamentals of C Programming
- Department: Department of Computer Science and Technology

Languages & Technical Skills

- **Programming Languages:** Language-agnostic; extensive experience with C/C++, Python, and Java
- **Technical Skills:** Git, \LaTeX , Linux Operations, PyTorch, Emacs
- **Languages:** Chinese (Native), English (Fluent), Cantonese (Basic)