Hanyue Lou (楼涵月)

⌂ https://hylz-2019.github.io/ · ⍟ HYLZ-2019 · ✉ hylz@pku.edu.cn

Education

Peking University · School of Computer Science   Ph.D. Candidate in Applied Computer Science
Conducting research on computational photography based on event cameras in the PKU Camera Intelligence
group (camera.pku.edu.cn). Supervised by Professor Boxin Shi.   2023.09 -- 2028.06 (Expected)

Peking University · School of EECS   B.Sc. in Computer Science and Technology
Selected for the Turing Class program and awarded an Honors Bachelor of Science degree. Ranked 62/205 in
major GPA.   2019.09 -- 2023.06

Publications & Patents

- [NeurIPS 2024] **Hanyue Lou***, Jinxiu Liang*, Minggui Teng, Bin Fan, Yong Xu, Boxin Shi. Zero-Shot Event-Intensity Asymmetric Stereo via Visual Prompting from Image Domain. Advances in Neural Information Processing Systems. 2024.

- [TPAMI 2024] Minggui Teng, **Hanyue Lou**, Yixin Yang, Tiejun Huang, and Boxin Shi. Hybrid All-in-focus Imaging from Neuromorphic Focal Stack. IEEE Transactions on Pattern Analysis and Machine Intelligence. 2024.

- [CVPR 2023] **Hanyue Lou**, Minggui Teng, Yixin Yang, Boxin Shi. All-in-Focus Imaging from Event Focal Stack. Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. 2023.

- [ECCV 2022] Minggui Teng, Chu Zhou, **Hanyue Lou**, Boxin Shi. "NEST: Neural Event Stack for Event-Based Image Enhancement". Proceedings of the European Conference on Computer Vision. 2022.

- [Patent – ZL 2023 1 0385281.6] Boxin Shi; **Hanyue Lou**; Minggui Teng; Yixin Yang. A Full-Focus Imaging Method and System Based on Event Cameras.

- [Patent – ZL 2022 1 1515957.0] Boxin Shi; Minggui Teng; Chu Zhou; **Hanyue Lou**. An Image Enhancement Method and Device Based on Event Signal Neural Encoding. 2024.

Practical Experience

Google Information Technology (Shanghai) Co., Ltd.   Algorithm Engineering Intern
Developed data visualization tools using Javascript, Java, SQL, and other languages.   2021.6 -- 2021.9

ReadingMap: A Browser Extension for Visualizing PDF Reading Behavior   Project Leader
https://github.com/HYLZ-2019/ReadingMap   2022.2 -- 2022.4
Project Overview: When reading long PDF files like textbooks or academic papers, it's easy to lose track of progress, struggle to focus on key points, and lack immediate feedback. To address these challenges, my roommates and I developed ReadingMap, a browser plugin that records and visualizes reading behavior, helping users quickly review progress, identify key sections, and experience a sense of accomplishment akin to 'unlocking a map' in long reading sessions.

Competitions & Awards

- **Academic Awards:** Peking University Outstanding Academic Achievement Award 2019-2020; Peking University Turing Class John Hopcroft Scholarship 2020-2021.

- **Innovation Projects:** The ReadingMap project won First Prize in the inaugural 'New Engineering' Innovation Competition ('Huawei Cup') at Peking University and First Prize in the 'Shuori Cup' of the 2022 (15th) Chinese Collegiate Computing Competition (Beijing Region).

- **CTF & HPC Competitions**: Finalist in the 1st Peking University Information Security Comprehensive Ability Contest 2021; Third Prize in the 2nd Peking University Information Security Comprehensive Ability Contest 2022; Third Prize in the 5th Peking University 'New Engineering' Hackathon 2022; Second Prize in the 0th Peking University High-Performance Computing Comprehensive Ability Contest 2023.

- **Foreign Language Proficiency**: CET-6 score: 635.