

# Shenghong Luo

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[Github](#) | [ResearchGate](#) | [Google Scholar](#)

## EDUCATION

BEng of Network Engineering (GPA 83/100) Sep.2019-Jun.2023 Huizhou University, China (Huizhou)  
**Core Courses:** Data Structure, Computer Network, Operating System, Principle of Computer Organization, Computer Network Engineering, Database Application Technology.

MSc of Information Technology Management Sep.2023-Jun.2024 Hong Kong Baptist University, China (Hong Kong)  
**Core Courses:** Electronic Transformation in Business, Principles and Practices of Data Analytics.

## RESEARCH INTEREST

Computer Vision; Low-level Computer Vision; 3D Reconstruction; AI Generated Content.

## RESEARCH EXPERIENCE

**Research Assistant, University of Macau** Aug.2022-now

- Collaborated extensively on the "DeVigNet" research paper accepted in AAAI24, actively contributing to the research process and playing a pivotal role in the research. Responsible for model development and experiments. Conduct a comprehensive dataset, encompassing more than 2000 images.
- Conducted comprehensive data collection and rigorous analysis pertaining to vignetting and low-light enhancement, effectively conducting experiments.
- Participating in the "UWFormer" research paper, actively contributing to writing the paper's framework, conducting experiments on more than 10 large datasets, and qualitatively and quantitatively analyzing the final results.
- **Gains:** Through the DeVigNet and UWFormer, I acquired a comprehensive understanding of the entire research process. Gained experience in code programming, encompassing generating motivation, selecting suitable methods, model development, conducting experiments, and creating datasets. Additionally, I am familiar with Transformer, CNN, semi-learning strategy, Diffusion, and application in Low-level Computer Vision.

**Research Assistant, Shenzhen Advanced Technology Research Institute, Chinese Academy of Sciences** Feb.2023-now

- Make a contribution to DocDeshadower and ShaDocFormer research papers, encompassing server setting, model development, and experiment implementation.
- Played a pivotal role in DocDeshadower.
- **Gains:** Through participating in research work, I acquired essential knowledge in Pytorch and Latex. Moreover, I gained insights into the SOTA methods in the field of Low-level Computer Vision. Moreover, I gained proficiency in research, particularly in the utilization of LaTeX, thus enhancing my overall comprehension.

## PUBLICATIONS

- **Luo S**, et al. Devignet: High-Resolution Vignetting Removal via a Dual Aggregated Fusion Transformer With Adaptive Channel Expansion, AAAI 2024 (Accept)
- Li Z, Zhang Z, **Luo S**, et al. An Improved Matting-SfM Algorithm for 3D Reconstruction of Self-Rotating Objects[J]. Mathematics, 2022, 10(16): 2892
- Li Z\*, **Luo S\***, et al. 3d reconstruction system for foot arch detecting based on OpenMVG and OpenMVS[C]//2022 5th

- International Conference on Pattern Recognition and Artificial Intelligence (PRAI). IEEE, 2022: 1017-1022. (\*Equal Contribution)
- **Luo S**, et al. DocDeshadower: Frequency-aware Transformer for Document Shadow Removal, IJCNN 2024 (In submission)
  - Chen W\*, **Luo S\***, et al. ShaDocFormer: A Shadow-attentive Threshold Detector with Cascaded Fusion Refiner for document shadow removal, IJCNN 2024(In submission) (\*Equal Contribution)
  - Chen X, Li Z, **Luo S**, et al. UWFormer: Underwater Image Enhancement via a Semi-Supervised Multi-Scale Transformer, IJCNN 2024(In submission)

## WORK EXPERIENCE

- |  |                   |
|--|-------------------|
| <b>Software Engineer Intern Unionman Technology Co., Ltd, Guangdong</b>  | Jul.2021-Dec.2021 |
| <ul style="list-style-type: none"> <li>➤ Led WeChat Mini Program development and conducted application testing.</li> <li>➤ Conducted market analysis to identify potential opportunities and formulated technology programs accordingly.</li> <li>➤ Provided support to team members and the manager in Linux development, debugging, and Springboot project development.</li> </ul>   |                   |
| <b>Information Technology Intern Wuhua Yijian Engineering Co., Ltd, Guangdong</b>  | Sep.2022-Jan.2023 |
| <ul style="list-style-type: none"> <li>➤ Contributed to the maintenance and upgrade of the company's network system. This involved tasks such as configuring network connections, managing network equipment, monitoring network performance, and troubleshooting network issues.</li> <li>➤ Gained proficiency in fundamental techniques and tools for office management, encompassing office asset management, office safety protocols, and routine office maintenance.</li> </ul> |                   |

## HONORS AND AWARDS

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|---|-----------|
| ➤ Hong Kong Baptist University MSc ITM Entrance Scholarship             | Sep.2023  |
| ➤ Third Prize in the National Youth Innovative Translation Competition  | June.2022 |
| ➤ Second Prize in Huizhou University Campus Dance Competition           | Dec.2020  |
| ➤ Excellence Award in Huizhou University New Student Talent Competition | Sep.2019  |

## EXTRACURRICULAR ACTIVITIES

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|-------------------------------------|-------------------|
| <b>Student Affairs</b>              |                   |
| ➤ Organizational department officer | Sep.2019-Sep.2020 |
| <b>Volunteer</b>                    |                   |
| ➤ Guitar performer                  | Dec.2019          |
| ➤ Dance performer                   | Dec.2020          |

## SKILLS

Python, Pytorch, Latex, OpenCV, Linux