

# Shu Yan

✉ shuyan9812@gmail.com  
🌐 <http://Shuyansy.github.io/>



## Profile

- Postgraduate in Computer Science from Harbin Institute of Technology, excellent international outlook with abundant theoretical knowledge and hands-on experience on computer vision, scene text detection, multi-modal learning, strong interests in related areas.
- Self-motivated and detail-oriented, high sensitivity on artificial intelligence, familiar with related methods on computer vision with outstanding communication skills in team work; collaborated with 2 enterprises and 2 domestic lab, possessed 2 patents and 6 thesis had been published.

## Education

- 2017 – 2021 **B.S., University of International Relations** Faculty of Cyber Science and Technology.  
Thesis title: *An End-to-end Text Spotter with Combination of Visual and Language Features*  
GPA: 3.75/4.0 (Top 5%)
- 2021 – 2023 **MA.Eng., Harbin Institute of Technology** Faculty of Computing.  
Thesis title: *Text Detection Methodology based on Semantic Enhancement and Its Application in Video Understanding.*  
Average Score: 86/100 (Top 10%)

## Honor

- 2018 **National Encouragement scholarship** (Top 3%)
- 2019 **1<sup>st</sup> class Honor** (Department-level, Top 15%)
- 2020 **1<sup>st</sup> class Honor** (School-level, Top 10%)
- 2021 **Outstanding Dissertation Award** (Beijing Province, Top 2%)
- 2022 **2<sup>ed</sup> class Honor** (School-level, Top 15%)
- 2023 **1<sup>st</sup> class Honor** (School-level, Top 10%)  
**Outstanding Graduate** (School-level, Top 10%)

## Accepted Publications





- 1 Y. Shu, W. Wang, Y. Zhou, *et al.*, “Perceiving ambiguity and semantics without recognition: An efficient and effective ambiguous scene text detector,” in *Proceedings of the 31th ACM International Conference on Multimedia (ACM MM)*, 2023.
- 2 Y. Shu, S. Liu, Y. Zhou, H. Xu, and F. Jiang, “Eizsr: Learning an enhanced intra-instance semantic relationship for arbitrary-shaped scene text detection,” in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023.
- 3 Y. Shu, S. Liu, H. Xu, and F. Jiang, *Read pointer meters in complex environments based on a human-like alignment and recognition algorithm*, 2023. arXiv: 2302.14323 [cs.CV].

- 4 Y. Mi, Y. Shu, H. Xu, S. Liu, and F. Jiang, "Vva: Video values analysis," in *The 6th Chinese Conference on Pattern Recognition and Computer Vision (PRCV)*, 2023.
- 5 H. Xu, S. Liu, Y. Shu, and F. Jiang, "A progressive image dehazing framework with inter and intra contrastive learning," in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023.
- 6 H. Xu, S. Liu, Y. Shu, and F. Jiang, "Uformer++: Light uformer for image restoration," in *Proceedings of the 30th International Conference on Neural Information Processing (ICONIP)*, 2023.



## Reviewing Publications

- 1 Y. Shu, Y. Li, B. Li, and X. Zhen, "Textlinker: Learning self-correcting component connectivity for arbitrary-shaped text detection," *IEEE Transactions on Image Processing (TIP)*,
- 2 Y. Shu, Y. Li, B. Zhang, and D. David, "Character can speak directly: An end-to-end character region excavation network for scene text spotting," *Neurocomputing*,

## Project Experience

- 2021  **Automatic Inspection of Robot Instrument.** Collaborated with Boshi Automation Co., Ltd to develop an accurate and efficient meter recognition system.
-  **Biomedical Image Recognition.** Involved in Institute of Automation, Chinese Academy of Sciences to advance the research on biomedicine image recognition and processing under the guidance from Professor Yang Ge.
- 2022  **Video Understanding Project (National key project).** Collaborated with People's Daily Online to develop a system for video Values Analysis.
- 2023  **Scene Text Detection and Recognition Engine.** Involved in Institute of Information Engineering, Chinese Academy of Sciences to advance the research on scene text detection, spotting and processing under the guidance from Associate Professor Yu Zhou.

## Skills

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| Languages |  Strong reading, writing and speaking competencies for English, Mandarin Chinese<br>CET-4, CET-6, TEM-4<br>IELTS 7.5 (Listening 7.0, Reading 8.5, Speaking 7.0, Writing 6.5) |
| Coding    |  Python (Pytorch), C++, Java, $\text{\LaTeX}$ , ...  |