Yu Hu

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EDUCATION

- **South China University of Technology** *Sept 2017 - Jun 2023*
  Ph.D. in Computer Science
  Supervisor: Prof. Hongmin Cai
  Thesis title: Robust Tensor Clustering for High-dimensional Data

- **China University of Mining and Technology** *Sept 2013 - Jun 2017*
  B.E. in Electric Engineering and Automation

WORK EXPERIENCE

- **The Hong Kong Polytechnic University** *Apr 2024 - Present*
  Department of Health Technology and Informatics
  Position: Postdoctoral Fellow

- **PazhouLab** *Jul 2023 - Mar 2024*
  Guangdong Artificial Intelligence and Digital Economy Laboratory (Guangzhou)
  Position: Research Associate

RESEARCH INTERESTS

- High-dimensional Data Mining;
- Multi-source Data Fusion;
- Tensor-based Unsupervised Learning;
- Medical Image Analysis.

SELECTED PUBLICATIONS

10. [TNNLS] **Y. Hu**, F. Qi, Y. Cheung, and H. Cai, "Discriminating Tensor Spectral Clustering for High-dimension-low-sample-size Data," in *IEEE Transactions on Neural Networks and Learning Systems*, in press.

9. [TKDE] **Y. Hu**, E. Guo, Z. Xie, X. Liu, and H. Cai, "Robust Multi-view Clustering through Partition Integration on Stiefel Manifold," in *IEEE Transactions on Knowledge and Data Engineering*, doi: 10.1109/ TKDE.2023.3253244.

8. [TPAMI] H. Cai, **Y. Hu**, F. Qi, B. Hu, and Y. Cheung, "Deep Tensor Spectral Clustering Network via Ensemble of Multiple Affinity Tensors," in *IEEE Transactions on Pattern Analysis and Machine*

Intelligence, in press, DOI: 10.1109/TPAMI.2024.3361912.

7. [TPAMI] H. Peng, **Y. Hu**, J. Chen, H. Wang, Y. Li and H. Cai, "Integrating Tensor Similarity to Enhance Clustering Performance," in *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 44, no. 5, pp. 2582-2593, 1 May 2022, doi: 10.1109/TPAMI.2020.3040306.

6. [TCYB] Z. Zhou, **Y. Hu**, Y. Zhang, J. Chen, and H. Cai, "Multi-view Deep Graph Infomax to Achieve Unsupervised Graph Embedding," in *IEEE Transactions on Cybernetics*, vol. 53, no. 10, pp. 6329-6339, Oct. 2023, doi: 10.1109/TCYB.2022.3163721.

5. [ICME] **Y. Hu** and H. Cai, "Multi-View Clustering Through Hypergraphs Integration on Stiefel Manifold," *2022 IEEE International Conference on Multimedia and Expo (ICME)*, Taipei, Taiwan, 2022, pp. 01-06, doi: 10.1109/ICME52920.2022.9859633.
*Selected as Oral Paper (**Top 22.9%**)*

4. [SPL] Z. Chen, Y. Huang, **Y. Hu**, and Z. Chen, "Phase Recovery With Deep Complex-Domain Priors," in *IEEE Signal Processing Letters*, vol. 29, pp. 887-891, 2022, doi: 10.1109/LSP.2022.3160927.

3. [PR] H Peng, H Wang, **Y. Hu**, W Zhou, and H Cai, "Multi-dimensional Clustering through Fusion of High-order Similarities," in *Pattern Recognition*, vol. 121, p. 108108, 2022.

2. [MIA] G Tao, H Li, J Huang, C Han, J Chen, G Ruan, W Huang, **Y. Hu**, T Dan, B Zhang, S He, L Liu, and H Cai, "SeqSeg: A sequential method to achieve nasopharyngeal carcinoma segmentation free from background dominance," in *Medical Image Analysis*, vol. 78, p. 102381, 2022.

1. [TCYB] B Zhang, H Cai, J Chen, **Y. Hu**, J Huang, W Rong, W Weng, Q Huang, H Wang, H Peng, "Fast and accurate clustering of multiple modality data via feature matching," in *IEEE Transactions on Cybernetics*, vol. 52, no. 6, pp. 5040-5050, June 2022, doi: 10.1109/TCYB.2020.3026396.

PROFESSIONAL ACTIVITIES

- Reviewer for prestige journals including IEEE TKDE and Artificial Intelligence Review

AWARDS

- 1st Prize of Natural Science of Guangdong Artificial Intelligence Industry Association *Jan 2023*
- ICME'2022 Oral Paper *Jul 2022*