Dr. Ming Zhang 章銘

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WORK EXPERIENCE

Centre for Intelligent Multidimensional Data Analysis Limited   Nov. 2021 - Present
Postdoctoral Fellow   **Funded by Research Talent Hub (RTH) Scheme**
Supervisor: Prof. Hong Yan

Working on a large AI project using tensor and hypergraph theories.

EDUCATION

City University of Hong Kong, Hong Kong   Sep. 2018 - Sep. 2021
Ph.D. in Electrical Engineering
Supervisor: Prof. Hong Yan

City University of Hong Kong, Hong Kong   Sep. 2017 - Aug. 2018
MSc. in Electronic Information Engineering   **with Distinction**
Supervisor: Prof. Tommy W S Chow

Nanjing Normal University, Nanjing, China   Sep. 2013 - Jun. 2017
B.Eng. in Automation   **Outstanding Undergraduate Thesis Award**
Supervisor: Prof. Fei Xie

RESEARCH INTERESTS

Machine Learning, Computer Vision.

My research interests mainly focus on visual recognition and retrieval. I am particularly interested in developing hashing/quantization methods for efficient large-scale image retrieval, making full use of unannotated data for semi-supervised/unsupervised retrieval, and preserving the semantics discrimination and modality invariance for cross-modal retrieval.

SELECTED PUBLICATIONS

- **Ming Zhang**, Xuefei Zhe, Hong Yan. "Orthonormal Product Quantization Network for Scalable Face Image Retrieval." *International Journal of Computer Vision (IJCV)*, Under Review, 2022.

- **Ming Zhang**, Xuefei Zhe, Shifeng Chen, Hong Yan. "Deep Center-Based Dual-Constrained Hashing for Discriminative Face Image Retrieval." *Pattern Recognition (PR)*, p. 107976, 2021. [Code]

- **Ming Zhang**, Sheheryar Khan, Hong Yan. "Deep Eigen-Filters for Face Recognition: Feature Representation via Unsupervised Multi-Structure Filter Learning." *Pattern Recognition (PR)*, p. 107176, 2020.

- **Ming Zhang**, Xuefei Zhe, Le Ou-Yang, Shifeng Chen, Hong Yan. "Semantic Hierarchy Preserving Deep Hashing for Large-Scale Image Retrieval." *The 17th International Conference on Machine Vision Applications (MVA)*, 2021 **(Oral)**. [Code]

- **Ming Zhang**, Hong Yan. "Improved Deep Classwise Hashing With Centers Similarity Learning for Image Retrieval." *The 25th International Conference on Pattern Recognition (ICPR)*, 2021.

SELECTED AWARDS

- **Research Tuition Scholarship (RTS)**, City University of Hong Kong   2020 - 2021

- **Honorable Mention**, The Interdisciplinary Contest In Modeling (ICM)   2016

- **The First Prize in Jiangsu Province**, China Undergraduate Mathematical Contest in Modeling (CUMCM)   2015

PROFESSIONAL ACTIVITIES

Paper Reviews

- IJCAI 2021

- Neurocomputing

Conference Presentations

- MVA 2021   July. 2021

- ICPR 2020   Jan. 2021

SKILLS

OS
GNU/Linux, Windows

Programming Languages
Python, Matlab, C/C++

Others
Markdown, Git, Vim