Siwei Wang

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From 2023.07, I am an assistant professor at Intelligent Game and Decision Lab, Academy of Military Sciences, Beijing. I graduated from the Department of Computer Science, National University of Defense Technology, with a bachelor/master/doctor degree, advised by Xinwang Liu and En Zhu, from 2013 to 2023.

I am working on Multi-modal Data Analysis, Scalable Unsupervised Learning and LLM Agent Planning. I have published 50+ papers at the top international AI conferences and journals, such as NeurIPS, ICML, ICLR, CVPR, ICCV, AAAI and IEEE TPAMI, TIP, TKDE, TNNLS. I also serve as Area Chairs for top conferences, including NeurIPS, ICML, AAAI and ACM MM.

EDUCATION BACKGROUND

National University of Defense Technology (Project 985/211) **Mar. 2020 – Jun. 2023**
Computer Science *Doctor* *Changsha, China*
Advised by Prof. Xinwang Liu and Prof. En Zhu

National University of Defense Technology (Project 985/211) **Sep. 2017 – Dec. 2019**
Computer Science *Master* *Changsha, China*
Advised by Prof. Xinwang Liu and Prof. En Zhu

National University of Defense Technology (Project 985/211) **Sep. 2013 – Jun. 2017**
Software Engineering *Bachelor* *Changsha, China*
Advised by Prof.Jianping Yin

RESEARCH INTERESTS

- Efficient multi-modal learn-ing
- Multi-modal fusion
- Multi-view clustering

PUBLICATIONS

Conference Papers:

- **NeurIPS22**: **S Wang**, X Liu, S Liu, J Jin, W Tu, X Zhu, E Zhu, Align then fusion: Generalized large-scale multi-view clustering with anchor matching correspondences, citations 18.
- **CVPR22**: **S Wang**, X Liu, L Liu, W Tu, X Zhu, J Liu, S Zhou, E Zhu. Highly-efficient incomplete large-scale multi-view clustering with consensus bipartite graph, citations 59.
- **IJCAI19**: **S Wang**, X Liu, E Zhu, C Tang, J Liu, J Hu, J Xia, J Yin. Multi-view Clustering via Late Fusion Alignment Maximization, citations 172.
- **ACM MM21**: M Sun, P Zhang, **S Wang**, S Zhou, W Tu, X Liu, E Zhu, C Wang. Scalable multi-view subspace clustering with unified anchors, citations 103.
- **ICML21**: X Liu, L Liu, Q Liao, **S Wang**, Y Zhang, W Tu, C Tang, J Liu, E Zhu. One pass late fusion multi-view clustering, citations 78.
- **AAAI22**: S Liu, **S Wang**, P Zhang, K Xu, X Liu, C Zhang, F Gao. Efficient one-pass multi-view subspace clustering with consensus anchors. citations 57.
- **ACM MM21**: J Liu, X Liu, Y Zhang, P Zhang, W Tu, **S Wang**, S Zhou, W Liang, S Wang, Self-representation subspace clustering for incomplete multi-view data. citations 49.
- **AAAI21**: J Liu, X Liu, **S Wang**, S Zhou, Y Yang. Hierarchical multiple kernel clustering, citations 38.
- **ACM MM21**: C Zhang, **S Wang**, J Liu, S Zhou, P Zhang, X Liu, E Zhu, C Zhang. Multi-view clustering via deep matrix factorization and partition alignment. citations 35.
- **CVPR21**: X Liu, S Zhou, L Liu, C Tang, **S Wang**, J Liu, Y Zhang. Localized simple multiple kernel k-means. citations 32.
- **ACM MM21**: Y Zhang, X Liu, **S Wang**, J Liu, S Dai, E Zhu, One-stage incomplete multi-view clustering via late fusion, citations 27.

- **ACM MM22**: J Zhang, L Li, **S Wang**, J Liu, Y Liu, X Liu, E Zhu. Multiple kernel clustering with dual noise minimization. citations 17.
- **AAAI23**: J Duan, **S Wang**, P Zhang, E Zhu, J Hu, H Jin, Y Liu, Z Dong. Graph anomaly detection via multi-scale contrastive learning networks with augmented view. citations 13.
- **AAAI22**: W Liang, X Liu, S Zhou, J Liu, **S Wang**, E Zhu. Robust Graph-Based Multi-View Clustering, citations 13.
- **CVPR23**: J Jin, **S Wang**, Z Dong, X Liu, E Zhu. Deep Incomplete Multi-view Clustering with Cross-view Partial Sample and Prototype Alignment. citations 7.
- **ACM MM23**: J Duan, P Zhang, **S Wang**, J Hu, H Jin, J Zhang, H Zhou, X Liu. Normality Learning-based Graph Anomaly Detection via Multi-Scale Contrastive Learning.
- **ACM MM23**: Y Wen, S Liu, X Wan, **S Wang**, K Liang, X Liu, X Yang, P Zhang. Efficient Multi-View Graph Clustering with Local and Global Structure Preservation.
- **ACM MM23**: Y Wen, **S Wang**, K Liang, W Liang, X Wan, X Liu, S Liu, J Liu, E Zhu. Scalable Incomplete Multi-View Clustering with Structure Alignment.
- **NeruIPS22**: W Liang, X Liu, Y Liu, JJ Huang, **S Wang**, J Liu, Y Zhang, E Zhu,Stability and Generalization of Kernel Clustering: From Single Kernel to Multiple Kernel.
- **AAAI23**: P Zhang, **S Wang**, L Li, C Zhang, X Liu, E Zhu, Z Liu, L Zhou, L Luo,Let the data choose: flexible and diverse anchor graph fusion for scalable multi-view clustering.
- **ICCV23**: Z Dong, **S Wang**, J Jin, X Liu, E Zhu,Cross-view Topology Based Consistent and Complementary Information for Deep Multi-view Clustering.
- **ACM MM23**: X Yang, C Tan, Y Liu, K Liang, **S Wang**, S Zhou, J Xia, SZ Li, X Liu, E Zhu, Convert: Contrastive graph clustering with reliable augmentation,citations 3.
- **ACM MM23**: X Yang, J Jiaqi, **S Wang**, K Liang, Y Liu, Y Wen, S Liu, S Zhou, X Liu,Dealmvc: Dual contrastive calibration for multi-view clustering,citations 3.
- **ACM MM22**: Y Zhang, W Liang, X Liu, S Dai, **S Wang**, L Xu, E Zhu,Sample Weighted Multiple Kernel K-means via Min-Max optimization,citations 3.
- **AAAI24**: S Liu, J Zhang, Y Wen, X Yang, **S Wang**, Y Zhang, E Zhu, C Tang, L Zhao, X Liu, Sample-level Cross-view Similarity Learning for Incomplete Multi-view Clustering.
- **AAAI24**: K Liang, L Meng, S Zhou, W Tu, **S Wang**, Y Liu, M Liu, L Zhao, X Dong, X Liu,MINES: Message Intercommunication for Inductive Relation Reasoning over Neighbor-Enhanced Subgraphs.
- **AAAI24**: S Yu, **S Wang**, P Zhang, M Wang, Z Wang, Z Liu, L Fang, E Zhu, X Liu: DVSAI: Diverse View-Shared Anchors Based Incomplete Multi-view Clustering.
- **AAAI24**: S Yu, **S Wang**, Z Dong, W Tu, S Liu Z Lv, P Li, M Wang, E Zhu, A Non-parametric Graph Clustering Framework for Multi-view Data.

Transcation Papers:

- **TIP21**: **S Wang**, X Liu, X Zhu, P Zhang, Y Zhang, F Gao, E Zhu, Fast parameter-free multi-view subspace clustering with consensus anchor guidance, citations 32.
- **TNNLS21**: **S Wang**, X Liu, L Liu, S Zhou, E Zhu,Late fusion multiple kernel clustering with proxy graph refinement, citations 54.
- **TKDE20**: J Liu, X Liu, J Xiong, Q Liao, S Zhou, **S Wang**, Y Yang,Optimal neighborhood multiple kernel clustering with adaptive local kernels, citations 53.
- **TNNLS23**: Y Liu, X Yang, S Zhou, X Liu, **S Wang**, K Liang, W Tu, L Li,Simple contrastive graph clustering, citations 50.
- **TKDE20**: W Liang, S Zhou, J Xiong, X Liu, **S Wang**, E Zhu, Z Cai, X Xu,Multi-view spectral clustering with high-order optimal neighborhood laplacian matrix, citations 45.
- **TMM21**: M Sun, **S Wang**, P Zhang, X Liu, X Guo, S Zhou, E Zhu, Projective multiple kernel subspace clustering, citations 36.
- **TNNLS22**: L Li, **S Wang**, X Liu, E Zhu, L Shen, K Li, K Li, Local sample-weighted multiple kernel clustering with consensus discriminative graph, citations 33.
- **TMM21**: T Zhang, X Liu, L Gong, **S Wang**, X Niu, L Shen,Late fusion multiple kernel clustering with local

kernel alignment maximization, citations 27.

- **ACM TOMM21**: Yi Zhang, Miaomiao Li, **Siwei Wang**, Sisi Dai, Lei Luo, En Zhu, Huiying Xu, Xinzhong Zhu, Chaoyun Yao, Haoran Zhou, Gaussian mixture model clustering with incomplete data, citations 25.
- **TNNLS21**: S Zhou, Q Ou, X Liu, **S Wang**, L Liu, S Wang, E Zhu, J Yin, X Xu,Multiple kernel clustering with compressed subspace alignment, citations 20.
- **ACM SIGIR23**: K Liang, L Meng, M Liu, Y Liu, W Tu, **S Wang**, S Zhou, X Liu, Learn from relational correlations and periodic events for temporal knowledge graph reasoning, citations 11.
- **TKDE23**: L Li, J Zhang, **S Wang**, X Liu, K Li, K Li,Multi-view bipartite graph clustering with coupled noisy feature filter, citations 9.
- **TNNLS22**: M Li, **S Wang**, X Liu, S Liu,Parameter-free and scalable incomplete multiview clustering with prototype graph, citations 9.
- **TFS22**: X Hu, X Liu, W Pedrycz, Q Liao, Y Shen, Y Li, **S Wang**, Multi-view fuzzy classification with subspace clustering and information granules, citations 8.
- **PR23**: W Li, **S Wang**, X Guo, E Zhu,Deep graph clustering with multi-level subspace fusion, citations 7.
- **TNNLS22**: S Liu, X Liu, **S Wang**, X Niu, E Zhu, Fast incomplete multi-view clustering with view-independent anchors, citations 13.
- **TNNLS23**: Y Wen, **S Wang**, Q Liao, W Liang, K Liang, X Wan, X Liu,Unpaired multi-view graph clustering with cross-view structure matching, citations 6.
- **TNNLS23**: Z Dong, J Jin, Y Xiao, **S Wang**, X Zhu, X Liu, E Zhu,Iterative Deep Structural Graph Contrast Clustering for Multiview Raw Data.
- **TCSVT23**: S Yu, **S Wang**, Y Wen, Z Wang, Z Luo, E Zhu, X Liu,How to Construct Corresponding Anchors for Incomplete Multiview Clustering.
- **TNNLS23**: S Yu, S Liu, **S Wang**, C Tang, Z Luo, X Liu, E Zhu, Sparse Low-Rank Multi-View Subspace Clustering With Consensus Anchors and Unified Bipartite Graph.

ACADEMIC SERVICE

- Area Chair: NeurIPS2024, ACM MM 2323/2024, AAAI 2023/2024/2025
- Conference Reviewer: Reviewer for ICML, ICLR, NeurIPS, CVPR, ICCV, ECCV, et al.
- Journal Reviewer: Reviewer for TPAMI, IJCV, TIP, TKDE, TNNLS, TCYB, TCSVT, TMM, et al.