GUIHONG WAN

☐ 469-929-3869 | ✉ guihong.wan@utdallas.edu | 🔗 linkedin.com/in/guihongwan/ | ⭘ guihongwan.github.io

EDUCATION

The University of Texas at Dallas, Richardson, TX
Ph.D in Computer Science   Jan. 2019 - Dec. 2022 (Expected)
The University of Texas at Dallas, Richardson, TX
M.S in Computer Science   Aug. 2017 - Dec. 2022 (Expected)
South-Central University For Nationalities, Wuhan, China
B.S. in Electronics and Information Engineering   Sep. 2006 - May. 2000
Stanford University, Stanford, CA
Data Mining and Applications Graduate Certificate   May. 2018 - Jun. 2019

RESEARCH INTERESTS

My research interests are in large-scale data mining, graph mining, and machine learning, with specific focus on anomalous pattern detection, feature selection/extraction and efficient algorithms for eigenvalue decomposition.

PUBLICATIONS

Guihong Wan and Haim Schweitzer. "Accelerated Combinatorial Search for Outlier Detection with Provable Bound on Sub-Optimality". Proceedings of the Thirty-Fifth AAAI Conference on Artificial Intelligence, **AAAI 2021**.

Guihong Wan and Haim Schweitzer. "A New Robust Subspace Recovery Algorithm (Student Abstract)". Proceedings of the Thirty-Fifth AAAI Conference on Artificial Intelligence, **AAAI 2021**.

Guihong Wan; Crystal Maung; Chenxu Zhang and Haim Schweitzer. "Fast Distance Metrics in Low-dimensional Space for Neighbor Search Problems". 20th IEEE International Conference on Data Mining **ICDM 2020**.

Guihong Wan; Crystal Maung and Haim Schweitzer. "Improving the Accuracy of Principal Component Analysis by the Maximum Entropy Method". 31st IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2019.

Baokun He; **Guihong Wan** and Haim Schweitzer. "A Bias Trick for Centered Robust Principal Component Analysis (Student Abstract)". Proceedings of the Thirty-Fourth AAAI Conference on Artificial Intelligence, **AAAI 2020**.

Baokun He; Swair Shah; Crystal Maung; Gordon Arnold; **Guihong Wan** and Haim Schweitzer. "Heuristic Search Algorithm for Dimensionality Reduction Optimally Combining Feature Selection and Feature Extraction". Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence, **AAAI 2019**.

Guihong Wan and Haim Schweitzer. "A Lookahead Algorithm for Robust Subspace Recovery When Irrelevant Data Abound". 37th IEEE International Conference on Data Engineering, ICDE 2021 (under review).

Guihong Wan. "Graph Sparsification via Meta Learning". 37th IEEE International Conference on Data Engineering, PhD Symposium, ICDE 2021 (under review).

Baokun He; **Guihong Wan**; Rong Jin and Haim Schweitzer. "The Bias Method for Robust Centered Principal Component Analysis". The ACM Transactions on Knowledge Discovery from Data, TKDD (under review, co-first author).

Technical Reviewer

- **Reviewer** The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2021)
- **Reviewer** International Conference on Tools with Artificial Intelligence (ICTAI 2018, 2019)
- **Reviewer** International Conference on Pattern Recognition (ICPR 2020)

WORK EXPERIENCE

Teaching Assistant Jan. 2019 - Present

The University of Texas at Dallas Richardson, TX

- Assist in the teaching of following graduate level courses: Machine Learning, Computer Vision, Artificial Intelligence, Data Representation.
- Help students to understand the underlying math, algorithms and projects.

Android Software Engineer Jul. 2010 - Mar. 2016

Actions Semiconductor Co., Ltd (NASDAQ-ACTS) Zhuhai, China

- Android Software Engineer in R&D Department.
- Director of the Application Team, in Production Development Department.

AWARDS

- Betty and Gifford Johnson Scholarship: 2020
- ICDM Travel Award: 2020
- AAAI Student Scholarship: 2019