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).
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