GUIHONG WAN

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EDUCATION

The University of Texas at Dallas, Richardson, TX
Ph.D in Computer Science — Jan. 2019 - Exp. 2022
The University of Texas at Dallas, Richardson, TX
M.S in Computer Science — Aug. 2017 - Exp. 2022
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; Haim Schweitzer, "Heuristic Search Algorithms for Approximating of One Matrix in Terms of Another Matrix", AAAI 2021(under review)
Guihong Wan; Haim Schweitzer, "A Lookahead Algorithm for Robust Subspace Recovery When Irrelevant Data Abound", AAAI 2021(under review)
Guihong Wan; Haim Schweitzer, "Accelerated Combinatorial Search for Outlier Detection with Provable Bound on Sub-Optimality", AAAI 2021(under review)
Bokun He; **Guihong Wan**; Rong Jin; Haim Schweitzer, "The Bias Method for Robust Centered Principal Component Analysis", TKDD (under review, co-first author)
Guihong Wan; Crystal Maung; Chenxu Zhang; Haim Schweitzer, "Fast Distance Metrics in Low-dimensional Space for Neighbor Search Problems", ICDM 2020
Guihong Wan; Crystal Maung; Haim Schweitzer, "Improving the Accuracy of Principal Component Analysis by the Maximum Entropy Method", ICTAI 2019
Bokun He; **Guihong Wan**; Haim Schweitzer, "A Bias Trick for Centered Robust Principal Component Analysis (Student Abstract)", AAAI 2020
Baokun He; Swair Shah; Crystal Maung; Gordon Arnold; **Guihong Wan**; Haim Schweitzer, "Heuristic Search Algorithm for Dimensionality Reduction Optimally Combining Feature Selection and Feature Extraction", AAAI 2019.

Technical Reviewer

- **Reviewer** Association for the Advancement of Artificial Intelligence (AAAI)
- **Reviewer** International Conference on Tools with Artificial Intelligence (ICTAI)
- **Reviewer** International Conference on Pattern Recognition (ICPR)

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.