Deyi Wang

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Education Background

University of California, Los Angeles	**Current GPA** 4.0/4.0
Department of Electrical and Computer Engineering, *Master of Science program*	**Sep. 2022 - Present**

Courses: Matrix Analysis (A+), Linear Programming (A), Nonlinear Dynamic Systems (A+), Convex Optimization (A+), Large Scale Social and Complex Networks: Design and Algorithms (A), Theoretical Foundation of Reinforcement Learning (A+)

Tongji University	**Grade** 87.94/100
College of Electronics and Information Engineering, *Bachelor of Engineering in Automation*	**Sep. 2017 - Jun.2021**
School of Mathematical Sciences, *Mathematics and Applied Mathematics (Minor)*	**Sep. 2019 - Jun.2021**

Work Experience

Shanghai Research Institute for Intelligent Autonomous Systems, Tongji University	**Jul.2021 - Jul.2022**

Research Assistant supervised by Prof. Xiang Li

Research Experience

The Research on Minimum Vertex Cover Based on Asymmetric Game Theory	**Nov.2021 - Nov.2022**

Supervisor: Prof. Xiang Li

- Mainly focuses on the minimum vertex cover problem in the aspect of game theory.

- Put forward a theorem interpreting the relationship between the SNE (strict Nash equilibrium) state and the MVC (minimum vertex cover) state in the weighted graph, and restricted the sufficient condition of $\{V_{MWVC}\} \subseteq \{V_{SNE}\} \subseteq \{V_{WVC}\}$ from $\Delta A/\Delta B > 4\lambda_A\lambda_B$ to $\Delta A/\Delta B > 4\lambda_A\lambda_B k_{max}$.

- The corresponding paper *"A Maximum Degree related Condition to Asymmetric Game in Weighted Vertex Cover Networks"* was accepted by IFAC WC 2023.

A Social Media Users Classification Algorithm Based on Community Detection	**May.2019 - May.2021**

Supervisor: Prof. Qi Kang

- Mainly about the local community detection problem in the complex network.

- Put forward n-order degree central nodes conception and improved the seed nodes choosing method.

- The corresponding paper was accepted by 《微型电脑应用》 (Microcomputer Applications) [1].

Publications

[1] **D. Wang**, A. Jiao, Y. Chen, J. An, Q. Kang, and L. Wang, "Local community detection based on n-order local degree central nodes," Microcomputer Applications, vol. 37, no. 6, pp. 1–4, 2021.

Awards

2019 National Physics Contest for non-Physics major undergraduates (Shanghai, China)	Second Prize
2020 National Mathematics Contest for non-Math major undergraduates (China)	Second Prize
2019 Tongji University Mathematical Contest in Modelling	Group Third Prize & Group Leader