YIPENG ZHAO

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EDUCATION

University of Chinese Academy of Sciences (UCAS) *Sep. 2019 - Jun. 2023*
B.S., Mathematics and Applied Mathematics
GPA: 3.85/4.0   Rank: 8/46
Selected courses: Seminar on Applied Mathematics(Discrete Mathematics and Optimization) (A), Game Theory (95), Combinatorics (90).

Columbia University in the City of New York *Jan. 2022 - May 2022*
Visiting Student, Fu Foundation School of Engineering and Applied Science
GPA: 4.247/4.33
Selected courses: Optimization Models and Methods (A+), Analysis and Optimization (A+), Applied Functional Analysis (A).

RESEARCH EXPERIENCE

Information Design of Acquiring Information Apr. 2024 - Present
NUS, Supervisors: Prof. Zhenyu Hu, Dr. Yangge Xiao

· Problem: A principal and an agent with aligned goals and access to different information collaborate to make a decision. However, obtaining information is costly for the agent. How can the principal encourage the agent to acquire information by revealing her own information strategically?
· Proposed an information design framework to model the interaction and formulate the problem.
· Solved the problem mathematically, analyzed and compared the optimal policies in different scenarios.

Distance Metrics and Prototype Distribution of ProtoPNet Jan. 2023 - May 2023
UCAS, Supervisor: Prof. Bo Liu

· Problem: As an interpretable model, ProtoPNet classifies images based on prototypes. However, we found that different prototype regions overlap with each other, impairing model's credibility. How to evaluate and address this deficiency?
· Proposed several indicators to describe the distribution of prototypes. Discovered and explained the pattern in which the distribution changes with distance metrics. Improved the model.

AWARDS AND HONORS

Excellence Student Cadre 2022-2023, awarded by UCAS	*Jun. 2023*
Merit Student 2022-2023, awarded by UCAS	*Jun. 2023*
Second-Tier Academic Excellence Scholarship 2021-2022, awarded by UCAS	*Nov. 2022*
Third-Tier Academic Excellence Scholarship 2020-2021, awarded by UCAS	*Nov. 2021*
Third-Tier Academic Excellence Scholarship 2019-2020, awarded by UCAS	*Nov. 2020*
Excellent League Member, awarded by UCAS	*Sep. 2020*
Merit Student 2019-2020, awarded by UCAS	*Jun. 2020*

SKILLS

Technologies	Python, Java, MATLAB, SAS, SPSS, Latex, MS-Office software
Languages	Mandarin Chinese (native), English (TOEFL 110, R30, L29, S22, W29)
Standardised Test	GRE 329+3.5 (V159, Q170, AW3.5)
Certificates	Basic Life Support Provider Certificate, Senior High School Teaching License