# Xiangchi Yuan

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#### **EDUCATION**

## **Brandeis University**

M.S.in Computer Science

Waltham, MA, USA

Aug. 2022 - May 2024

## University of Electronic Science and Technology of China (UESTC)

B.Eng. in Electronic and Information Engineering, Major GPA 3.82

Chengdu, Sichuan, CN Aug. 2018 – May 2022

# RESEARCH INTERESTS

Graph Mining/Data Mining, Data-efficient AI, Trustworthy AI, Natural Language Processing.

## **Publications**

- [3] Xiangchi Yuan, Chunhui Zhang, Yijun Tian, and Chuxu Zhang. Exploring Anti-degraded Graph Robust Learning Against Adversarial Attacks. In Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS 2023 Under review).
- [2] **Xiangchi Yuan**, Chunhui Zhang, Yijun Tian, and Chuxu Zhang. Navigating Graph Robust Learning against All-Intensity Attacks. In Fortieth International Conference on Machine Learning (ICML) 2023-New Frontiers in Adversarial Machine Learning Workshop (ICML 2023 AdvML-Frontiers Workshop).
- [1] Lang Qin, Yuntao Xie, Xinwen Liu, **Xiangchi Yuan**, and Huan Wang. An End-to-End 12-Leading Electrocardiogram Diagnosis System Based on Deformable Convolutional Neural Network With Good Antinoise Ability. In IEEE Transactions on Instrumentation and Measurement (IEEE TIM 2021).

## RESEARCH EXPERIENCE

Research Assistant

Jul. 2023 – Present

The Pennsylvania State University

University Park, PA, USA

- Applied contrastive learning and data augmentation to Fine-tuning Bart for multi-attributes summarization.
- Designed Automatic Prompt Engineer for conditional context summarization by LLMs.

Research Assistant

Sep. 2022 – Jun. 2023

Brandeis University

- Waltham, MA, USA
- Proposed Denoise Masked Graph Auto-encoder to remove malicious edges of the attacked graph.
- Revealed the connection between differential privacy(DP) and GNN robustness, and applied the idea of differential privacy to GNN to improve the robustness.
- Introduced the mixture-of-experts model to GNN layer to select the better DP experts against attacks.
- Provided a theoretical robust guarantee for designed Differential Privacy Mixture-of-Experts module.

## Undergraduate Research Assistant

Sep. 2020 – Feb. 2021

University of Electronic Science and Technology of China

Chengdu, Sichuan, CN

- Designed Deformable Convolutional Neural Network With Good Antinoise Ability for ECG classification
- Classified different ECG signals for diagnosis with employing Tri-net combined Tri-training

## Work Experience

# Software Development Engineer Intern

Apr. 2022 – Jul. 2022

 $VeriSilicon\ Microelectronics,\ GPU\ Arch\ Group$ 

Chengdu, Sichuan, CN

- Designed HDR adaptive curve fitting algorithm: meeting hardware requirements and keeping high precision.
- Implemented CCM gamut mapping which suits hardware with fixed-point calculation for different Gamut settings.
- This SoC IP was used in Google Pixel.

## Honors

UESTC University-wide Outstanding Student Scholarship

Nov. 2020, Nov. 2021

#### SERVICE

The Web Conference (WWW) 2023

Sub-reviewer

The International Conference on Machine Learning (ICML) 2023

Sub-reviewer