

# YING-XIN WU

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Address: University of Science and Technology of China, Hefei, China, 230026

## EDUCATION

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**University of Science and Technology of China (USTC), Hefei, China**

School of Data Science

July 2019 - Present

School of Information Science

Sep 2018 – June 2019

### Performance:

Major: **4.09/4.3 or 93.47/100**, Overall: **4.03/4.3 or 92.37/100**, Ranking: **1/28**

(The first enrollment of the School of Data Science, selected from the university's first-year students.)

### Hightlight:

*Intro. to Data Science(99), Stochastic Process(98), Discrete Mathematics(95), Operation Research(95), Algorithm for Big Data(95), Probability Theory(95), Information Theory(94), Mathematical Modeling(93), Machine Learning(93), Deep Learning(91), Computer Vision(100), Nature Language Processing(94)*

### Standard English Test:

*TOEFL: Total: 102/120, Reading: 29, Listening: 28, Speaking: 21, Writing: 24*

*GRE: Total: 322/340, Verbal: 152, Quant: 170, Writing: 3.5*

## PUBLICATION

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**Knowledge-Aware Meta-learning for Low-Resource Text Classification,**

Huaxiu Yao, **Yingxin Wu**, Maruan Al-Shedivat, Eric P. Xing,

EMNLP 2021, Punta Cana, Dominican Republic, Nov. 2021 (Short Paper).

Two paper about explaining Graph Neural Nets

**Under Review of NeurIPS**

One paper about attribution for graphs via Reinforcement Learning

**Under Review of TAPMI**

## MAIN RESEARCH EXPERIENCE

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**Knowledge-Aware Meta-learning**

May 2021 - August 2021

*Major Project*

**Advisor:** **Dr. Huaxiu Yao** (US, Stanford)

**Introduction:** This paper studies a low-resource text classification problem and bridges the gap between meta-training and meta-testing tasks by leveraging the external knowledge bases.

**Contribution:** Code implementation.

**Explainability of Graph Neural Networks**

May 2020 - July 2021

*Major Project*

**Advisor:** **Dr. Xiang Wang** (Singapore, NUS)

**Introduction:** In this work we aim to answer questions like “Why this GNN model made a certain prediction?” from a causal perspective. We proposed a model-agnostic tool, Screener, to generate faithful and concise explanations for any GNN model.

**Contribution:**

Proposed the cluster-based version of Causal Screening; Created dataset VG-5 from Visual Genome using web crawlers; Code implementation.

## Bat Call Identification via Machine Learning

July 2020 - August 2020

*Internship project(Online)*

**Advisor:** [Prof. Mark Reynolds](#) (Australia, UWA)

**Introduction:** Biological voice recognition is widely applied in real world. In this work, we use fourier transform to process bat calls, and adopt various machine learning algorithms to classify them.

**Contribution:** Data processing and code implementation; Analysis of empirical results.

## Graph Convolution Network for Recommendation

August 2019 - May 2020

*Major Project*

**Advisor:** [Prof. Xiangnan He](#) (Hefei, USTC)

**Introduction:** LightGCN, a new model for recommendation, includes only the most essential component in GCN – neighborhood aggregation – for collaborative filtering, which leads to a simple, linear, and neat framework for recommendation.

**Contribution:** <https://github.com/Wuyxin/LightGCN>

Use parallel sampling on CPU to improve the computation efficiency; Integrate Cython for fast evaluation.

## LEADERSHIP AND ACTIVITIES

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· President of Shuang-xin Calligraphy and Painting Association	June 2020- June 2021
Secretary of the Student Union, School of Information Science	Sep. 2018- Sep. 2019

## RELATED TECHNICAL SKILLS

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<b>Skills</b>	Programming Skills: C/C++, Python.
<b>Platforms</b>	Windows, Linux.
<b>Interests</b>	Graph Neural Network, Explainable and Trustworthy AI, Causal Inference and Meta-learning

## SCHOLARSHIP AND AWARDS

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### *Scholarship:*

Chen Linyi Scholarship Winner	2020 Fall
USTC Silver Scholarship for Outstanding Students	2019 Fall

### *Awards:*

First prize of HuaWei Big Data Training Camp	2019 Fall
USTC Energy Conservation and Emission Reduction Innovation Competition	2019 Fall
MCM/ICM Mathematical Modeling Contest, Meritorious Winner(6%)	2020 Spring
Excellent graduate in the Summer Research Program of University of Western Australia.	2020 Summer
First prize in Calligraphy Contest of USTC	2019 Fall and 2020 Fall