

# XIASI WANG

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## EDUCATION

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<b>The Hong Kong University of Science and Technology</b>	Hong Kong SAR
<b>Ph.D. in IIP (Data Science and Analytics)</b>	2020.09 – 2024.06
Research interests: Machine Learning, Representation Learning	
<b>University of Science and Technology of China</b>	Hefei, China
<b>B.S. in Statistics</b>	2016.09 – 2020.06
<b>Honors:</b> Outstanding Undergraduate Academic Scholarship (2017–2019, top 30%)	

## INTERNSHIP

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<b>Huawei Noah's Ark Lab</b>	Shenzhen, China
<b><i>Artificial Intelligence Researcher Intern</i></b>	2022.04 – 2023.04

- Focused on self-supervised learning and researched the multi-view perspective of self-supervised learning in computer vision area
- Refined multi-view information bottleneck by developing novel multi-view entropy bottleneck method to obtain the minimal sufficient representation with better performance
- Conducted empirical studies to explore the behaviors of MVEB; validated the superiority of MVEB on ImageNet classification linear evaluation protocol (76.9% top-1 acc. with ResNet-50 backbone, so far the best) and extensive downstream tasks including transfer learning and object detection
- **Manuscript:** MVEB: Self-Supervised Learning with Multi-View Entropy Bottleneck, 2022

## PROJECTS

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<b>The Hong Kong University of Science and Technology</b>	Hong Kong SAR
<b><i>Negatives Selection for Contrastive Learning</i></b>	2021.12 – 2022.04

- Researched the selection criterion of negative samples in contrastive learning
- Used quantitative analysis to find that the semi-hard negatives play an important role in contrastive learning; disclosed an exponential decaying relation of hardness vs false rate
- Proposed a hardness-aware debiasing method based on the observed relation to mitigate the side effect of false negatives; achieved an improvement of 2%-3% top-1 acc. on Cifar-10/100 classification

<b>University of Science and Technology of China</b>	Hefei, China
<b><i>Systemic Risk Contagion of Financial Network</i></b>	2019.07 – 2020.01

- Investigated a risk contagion model for financial networks which triggers the contagion before default
- Replicated the risk contagion model using R language; collected the data of chinese commercial bank network to empirically study the financial risk contagion model
- Explored the model's sensitivity to its parameters
- **Publication:** Solvency Contagion Risk in the Chinese Commercial Bank Network, *Physica A*, 2021

## COMPUTATIONAL SKILLS & OTHERS

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<b>Programming Languages</b>	Python (Numpy, Pandas, Matplotlib), R, Linux (basic)
<b>Languages</b>	Mandarin, English
<b>Technical Skills</b>	Deep Learning (Pytorch)
<b>Leadership</b>	Students' Union of School of Management, USTC (Vice President)