XIANGYU SHI

xyu.shi@outlook.com | xiangyus@kth.se | +46 760633872 | |

EDUCATION

KTH Royal Institute of Technology *August 2023 - June 2025*
Master of Machine Learning candidate

Harbin Institute of Technology *August 2019 - June 2023*
Bachelor of Computer Science and Technology Overall Score: 91.95/100

INTERNSHIPS

KTH Royal Institute of Technology *Data Systems Lab* Stockholm, Sweden
Research Engineer *November 2023-now*

- Responsible for the development of graph neural network (GNN)-based model for Orb DB project. Apply and modify the existing GNN models, and Query2Box, to make the model inductive and scalable.

Chinese University of Hong Kong, Shenzhen *Speech and Language Lab* Shenzhen, China
Research Assistant (Adviser: Prof. Zhizheng Wu) *April 2023-October 2023*

- Investigated the effectiveness of one-class classification, and data augmentation methods in voice replay attack detection. Achieved state-of-the-art performance in ASVspoof 2021 dataset.

Harbin Institute of Technology *Massive Data Computing Center* Harbin, China
Research Assistant (Adviser: Prof. Hongzhi Wang) *January 2021-May 2022*

- Assisted with research on applications of AutoML, including an optimizable AutoML system, and AutoML methods applied to model compression, federated learning and click-through rate prediction.

PREPRINTS AND PUBLICATONS

1. **Xiangyu Shi**, Yuhao Luo, Li Wang, Zuoou Li, hao Li, Lei Wang, Zhizheng Wu. Audio Compression-assisted Feature Extraction for Voice Replay Attack Detection [arxiv]
   - We evaluated many kinds of data augmentation methods for voice replay attack detection. We achieved state-of-the-art in this field.
2. Chunnan Wang, Chen Liang, Hongzhi Wang, **Xiangyu Shi**. Automated Click-Through Rate Prediction Model Integration *Submitted to TKDD*
3. Chunnan Wang, **Xiangyu Shi**, Hongzhi Wang. Fair Federated Learning with Multi-Objective HPO *Submitted to TKDD*
   - We proposed to improve the process of aggregating in federated learning by an AutoML technique.
4. Chunnan Wang, Hongzhi Wang, **Xiangyu Shi**. AutoMC: Automated Model Compression based on Knowledge Graph and Progressive search strategy [arxiv] *Accepted by ICDE2024*
   - We proposed an automatic tool for model compression with a progressive search strategy.
5. Chunnan Wang, Hongzhi Wang, Xu Bo, Xintong Song, **Xiangyu Shi**, Yuhao Bao. CO-AutoML: An Optimizable Automated Machine Learning System [link] *Accepted by DASFAA2022 Demo Track*
   - We developed an optimizable AutoML system, which can continuously optimize the search space.

HONORS

Outstanding Students of 2019 ∼ 2020 *December 2020*
Second Prize of People's Scholarship, Top %7 *Septemper 2020, Septemper 2021*
International Informatics Olympiad China Team Selection Competition (CTSC), Third Prize *May 2018*
National Olympiad in Informatics in Provinces (NOIP), First Award, Top 30 *November 2017*