# Zihao Ye

# Personal Email | School Email | Website

#### **EDUCATION**

### Carnegie Mellon University, Pitssburgh, USA

09/2024 - Present

M.S. Artificial Intelligence Engineering – Information Security

Beijing University of Posts and Telecommunications, Beijing, China 09/2019 - 06/2023

B.S. Telecommunication Engineering

#### **PUBLICATION**

### Improving Image de-raining Models using Reference-guided Transformers

Zihao Ye, Jaehoon Cho, Changjae Oh

2024 IEEE International Conference on Image Processing (ICIP)

#### RESEARCH EXPERIENCE

# Tsinghua Statistical Artificial Intelligence & Learning Group

04/2022 - 01/2024

 $PyTorch \mid C++ \mid CUDA$ 

Supervised by Prof. Jianfei Chen

- Utilized fully quantized training for low-precision training on the Diffusion Model EDM
- Explored the application of stochastic depth and attention head dropping techniques as replacements for dropout in deep neural networks to provide implicit regularization
- Evaluated the stochasticity of these methods to gauge their respective strengths in implicit regularization and assessed their impact on training speed

### **BUPT Pattern Recognition and Intelligent System Laboratory**

01/2022 - 04/2022

PyTorch | scikit-learn | MATLAB

• Employed various image processing methods such as Harris Corner Detector and changing color model to image pre-processing so that the accuracy and coherence of image recognition tasks in FGIA are perfected

### PROFESSIONAL EXPERIENCE

# Machine Learning Researcher (Intern), Honor of Kings, Tencent

01/2024 - 06/2024

Pyspark | HQL | TensorFlow

- Constructed a champion recommendation attention model, increasing ctcvr by 13%
- Constructed training samples for model development utilizing PvSpark and SQL
- Employed PySpark and SQL for data extraction and analysis, enabling targeted improvements to the model and sample dataset, thereby optimizing online performance
- Received S-level (Top) rating for outstanding performance during the internship

### Machine Learning Quant Researcher (Intern), Southwest Securities

08/2021 - 01/2022

PyTorch | Scikit-learn | Wireshark | Wavelet Analysis | MATLAB

Construct a secondary stock market price-prediction neural network model and a decision-making model

### **SKILLS**

Language: PyTorch, PySpark, SQL, TensorFlow, Java, MATLAB, C++, C, JavaScript