

SHUZHAO XIE

(+86) 188-1025-9895 • xiesz1999@163.com • GitHub • LinkedIn

EDUCATION

Tsinghua University	Beijing, China
Master student in Computer Technology	2020 – 2023
Beijing Normal University	Beijing, China
B.S. in Computer Science and Technology	2016 – 2020

EXPERIENCE

Inflexion Lab	Shenzhen, China
Research Assistant, Advisor: Zhi Wang, Yifei Zhu	07/2020 – Now

- Measured the performance (e.g., accuracy, throughput and latency) of machine learning cloud services (mainly object detection services) on AWS, Azure, Google Cloud, and Alibaba Cloud.
- Found the high cost with lower accuracy problem under the multi-cloud situation and solved this NP-hard problem with combinatorial reinforcement learning algorithms.
- The evaluation result shows that our solution decrease the cost by 67% without any sacrifice to accuracy.
- Introduced an additional neuron and a supported loss function to help the traditional model deal with unlabeled data, the accuracy of known classes has been increased by 10% and the accuracy on novel class discovery is up to 90%.
- Implemented a system that can deploy Transformers distributedly and adaptively based on Megatron-LM.

Youtu Lab, Tencent	Shanghai, China
Research Assistant, Advisor: Chenyang Guo	01/2022 – 06/2022

- Analyzed user data from Hupu and added the support of TFRecord to reduce the latency of training their recommendation model.
- Implemented Faster-RCNN and converted it into Torch Script with LibTorch and CUDA.
- Tested latency and accuracy of object detection models under PyTorch, ONNX, OpenVino, and TensorRT.

HealAll Tech	Shenzhen, China
Lung Sound Detection Researcher Intern, Advisor: Zhi Wang, Guoxian Xu	06/2022 – Now

- Extracted acaustic features, such as Mel Spectrogram, MFCC and Energy Summation and implemented a series of models and papers including Glance-and-Gaze, Faster-RCNN and Conformer (CNN+Transformer).
- The accuracy on all classes and abnormal classes is 95% and 76% on HF-Lung-V1 dataset respectively.
- Managed the algorithm team and coordinated private dataset collection process.

PUBLICATIONS

- **Shuzhao Xie**, Yuan Xue, Yifei Zhu and Zhi Wang. “Cost Effective MLaaS Federation: A Combinatorial Reinforcement Learning Approach”, **INFOCOM’22 (CCF-A)**, [Page] [PDF]
- Zeming Chen*, **Shuzhao Xie***, Shiji Zhou, Zhi Wang, Tao Dai, and Yuan Xue. “Open-World Recognition via Semi-Supervised Learning with Unseen Neuron”, [PDF]

SELECTED AWARDS

Bronze Prize, ACM-ICPC Asia Regional Contest (Jiaozuo Station)	2018
Bronze Prize, CCPC Regional Contest (Qinhuangdao Station)	2018

SKILLS

Programming Languages: Python, C/C++, Bash, XML, Java
Tools and Frameworks: Git, L^AT_EX, PyTorch, CUDA, Docker, Spark, Android