



Education

2018 ~ 2021 Master of Particle Physics and Nuclear Physics

Chinese Academy of Sciences

 $2017 \sim 2018$ Master of Particle Physics and Nuclear Physics

University of Science and Technology of China

2013 ~ 2017 Bachelor of Engineering

North China Electric Power University

Working Experience

2021.05 ~ present

Algorithm Engineer

Matrixelement, Shanghai, China

Be responsible for MPC protocol design and optimization

- 1. Design XGBoost protocols under MPC setting
- 2. Design Sorting, Permutation protocols and optimize them.
- 3. Write patents about MPC
- 4. Do some coding.

Skill

- 1. Familiar with secure multi-party computing (SecureNN, ABY3, FALCON, etc.), Federated Learning (Secure Boost) and Computer Vision(Object Detection). All have related working experience.
- 2. Familiar with LR, PCA, SVD, SVM, Decision Tree, Random Forest, Kmeans, GMM, HMM, GBDT, XGBoost.
- 3. Familiar with C, C++, Python, Tensorflow and Pytorch.

Internship

2020.11 ~ 2021.02

1. Algorithm Engineer

Blue Elephant, Hangzhou, China

Modify the FATE framework and re-implement the federated learning components.

2019.07 ~ 2019.10

2. IC Verification Engineer

Cambrian, Beijing, China

Coding on C, C++ and Python.

2019.03 ~ 2019.06

3. Algorithm Engineer

Hikvision, Hangzhou, China

Implement YOLOv3 Object Detection from scratch and work on projects about voiceprint recognition

Awards

2014.11 Second Prize, **National College Mathematic Contest**, China

2014.11 Learning Excellence, North China Electric Power University, Hebei, China

2015.11 Second Prize, College Mathematical Modeling Competition, Hebei, China

Publication

2019

Jifeng Du, Jun Meng, Xiao-Yan Li, Beien Zhu and Yi Gao, Multiscale atomistic simulation of metal nanoparticles under working conditions, *Nanoscale Adv.*