# Linbin YANG

Hangzhou, CHINA

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#### **EDUCATION**

University of California, San Diego, La Jolla, CA

Master in Computer Science Sep. 2018 – Jun. 2020

1st price in WeBank Fintechathon Contest

University of Electronic Science and Technology of China, Sichuan, China

Bachelor in Computer Software Engineering Sep. 2014 – Jul. 2018

National Scholarship of PRC (1/113)

Outstanding Undergraduate Student in Sichuan Province (50/5500)

## **WORK EXPERIENCE**

## Alibaba, Hangzhou, China

Data consistency maintenance and e-coupon merchant system management

Jun. 2020 - Present.

- o Won 2021 Class-A Award in Alibaba TaoTech Group.
- Designed SAGA framework Fisher by using System Log, Flink and MaxCompute to limit the time of finding and correcting one data consistency problem to less than <u>1 minute</u> which greatly reduced labor input cost of dealing with data consistency by <u>80%</u> after implementing Fisher in global shopping festival of Alibaba.
- Removed the old version of e-coupon product while ensured the online stability of system. Connected e-coupon
  merchant system with promotional and advertising system to make the whole marketing process more smooth to use
  and increased the conversion rate of e-coupon by 40%.

#### Clustar.ai, Shenzhen, China

Software engineer internship program

Sep. 2019 - Jun. 2020

- Responsible for using C/C++ and CUDA to write backend computing library for federated AI framework. Conducted
  research on how to efficiently compute 1024-bit big number on GPU and summarized all work as one patent which was
  released on 2022/04.
- Developed distributed safe training tool for Machine Learning using C/C++, Python, grpc. Combined ECDH AES128 algorithm and Intel SGX technology to secure remote communication and local computing of machines.

## **PROJECT**

#### **Tensorflow Model Inference Tool**

Guide: Derivatives China Capital, Shenzhen, China

Oct. 2019 – Jan. 2020

- Used Python scripts to parse graph structure of TensorFlow Model from CKPT into JSON structure file.
- o Adopted Multi-way tree and Topology algorithm to store and restore the compute graph.
- Developed efficient program using Eigen to achieve model inference process based on the extracted compute graph.

## **Branch Predictor Using Perceptron**

Guide: CSE240a, University of California, San Diego, CA

Mar. 2019 - Jun. 2019

- Developed branch prediction algorithm using traditional GShare and Tournament models in C.
- Optimized Tournament model with Perceptron algorithm to do branch prediction task.

## **Text Tag Prediction**

Guide: IFLYTEK, Hefei, China

Apr. 2018 - Jun. 2018

- o Trained TextRNN model on 300 million text data with 1999 labels to predict 5 possible tags for each text.
- o Replaced the softmax classifier with multi-binary classifier to make the model converge faster during training.
- o Optimized the model evaluation method by combining F-score with position weighting.

#### **SKILLS**

Tools: Git, Docker, Linux/Unix, VSCode

Languages: Java, C/C++, Python, CUDA, SQL, JavaScript, HTML, CSS, Linux Shell, Haskell

Framework: Spring, Flink, MaxCompute, FATE, TensorFlow, OpenMP, LLVM, Eigen, Intel SGX, React.js.