# HONGZHEN LIANG

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#### **EDUCATION**

The Ohio State University

September 2020 - December 2022

Bachelor of Science in Computer Science and Information

GPA: 3.767/4.0

NanJing Normal University

September 2019 - July 2020

Bachelor of Science in Computer Science

South China Normal University

September 2018 - July 2019

Bachelor of Engineering in Computer Engineering

#### RESEARCH EXPERIENCE

Reducing Tail Latency of Modern Storage System

March 2022 - present

Undergraduate Research Assistant, Supervisor: Prof. Haryadi S. Gunawi.

- · Integrated and refactored the codebase and architecture of LinnOS and IONet to build an automated test pipeline for research
- · Introduced LSTM, Random Forest and CRF models into the FlashNet architecture and reduced the FNR (False Negative Rate) by more than 20%
- · Identified the imbalance learning problem and utilized the under sampling technique, which successfully accelerated the training speed to another magnitude
- · Justified the continual learning technique's effectiveness and conducted multiple data visualizations to intuitively illustrate the research results

Extended Research of ZebraConf

September 2021 - March 2022

Undergraduate Research Assistant, Supervisor: Prof. Yang wang & Prof. Michael D. Bond

- · Developed an innovative safe and efficient method to test reconfiguration of running heterogeneous Hadoop clusters with diverse parameter and classify error types in the node communications
- · Manually troubleshoot high-risk parameters of online heterogeneous Hadoop systems and resolve synchronization issues by modifying the source codes

Movement Correction Training System Based on Myoelectric April 2019 - April 2020 National Innovation and Entrepreneurship Project

- · Collected electrical signals from human muscle surfaces with the wearable units
- · Developed training functions based on the analysis and prediction of body movement states
- · Designed and implemented an novel approach combined with Computer Vision technique and Myoelectric sensor, which significantly improved the overall motion prediction accuracy

## WORK EXPERIENCE

Baidu Inc

Data Analyst Intern, YY Division

February - July 2021 Guangzhou, China

· Conducted in-depth market research for organizing market campaigns, brandings and online promotions; planned and managed joint-marketing with Baidu partners (Oppo, Vivo)

- · Analyzed sales data to identify the preferred sales forms and developed a set of corresponding recommendations for the Marketing team
- · Proactively assisted managers to coordinate different departments and help with administration duties
- Responsible for providing data-driven analysis and support to help YY division split from Joyy Inc merge into Baidu Inc

Joyy Inc
Data Analyst Intern

September 2020 - February 2021 Guangzhou, China

- · Maintained giant volumes of client data and utilized quantitative research methods to capture purchasing trends for iterating sales and marketing strategies
- · Managed event operations covering planning and implementing operation schedules, ensuring on-time delivery for live media and VIP
- · Collaborated with strategy analysts to address their requests and problems regarding the Live event, increasing satisfaction and efficiency of the streamer and audiences

VIP.COM
Data Analyst Intern

June - August 2020 Guangzhou, China

- · Cooperated with vendors to promote products and enhance their online store operations
- Deeply engaged in the data-driven sales support with Vans to boost their success on VIP.COM's platform

## **HONORS & AWARDS**

Dean's List 2020 - 2022 Second prize of China Computer Design Competition (Guangdong) June 2020 Dean's Undergraduate Scholar September 2019 Execellent Award of China Collegiate Programming Contest (Guangdong) May 2019

## TECHNICAL STRENGTHS

Language: Native Chinese speaker(both Mandarin and Cantonese), Fluent in English.

Programming Language: C, C++, Python(NumPy, Pandas, SciPy), Java, JavaScript

Database: MySQL, SQL Server, SQLite

Framework: TensorFlow, Keras, Scikit-learn, Hadoop, Spark, Spring, Flask