HONGZHEN LIANG

graduation date 12/2022

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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

Flashnet: Reducing Tail Latency of Modern Storage System — *March 2022 - present*
Undergraduate Research Assistant — **University of Chicago**
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

Online ZebraConf — *September 2021 - March 2022*
Undergraduate Research Assistant — **The Ohio State University**
Supervisor: **Prof. Yang wang & Prof. Michael D. Bond**

- Developed an innovative safe and efficient method to test reconfiguration of running heterogeneous Hadoop clusters with over **500 parameters** and classify error types in the node communications
- Manually troubleshoot **4 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 — **South China Normal University**

- 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

The Ohio State University — *September 2022 - December 2022*
Teaching assistant, CSE 3901: Web Applications — **Columbus, Ohio**

- Responsible for setting grading rubrics and assisting students with their work

Baidu Inc   *February - July 2021*
Data Analyst Intern, YY Division   **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 from **Baidu Tieba(45 million users)** 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 directly to COO and support to help YY division split from Joyy Inc merge into Baidu Inc

Joyy Inc   *September 2020 - February 2021*
Data Analyst Intern   **Guangzhou, China**

· Maintained over **24 million** clients' 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   *June - August 2020*
Data Analyst Intern   **Guangzhou, China**

· Cooperated with over **20** 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
· Develop personalized advertising push marketing strategies by analyzing the user profiles of over **69 million users**

TECHNICAL STRENGTHS

Language:	Native Chinese speaker(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

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*