

Zishuo Liu

Tel: +1 8576059465 | Email: ZishuoLiu@proton.me | Boston, MA

Linkin: <https://www.linkedin.com/in/zishuo-liu-2726b2301/>

Website: <https://springfoggy23.github.io/cv.html>

Education

Boston university (BU), Boston, MA	2024/09-2026/01 (Expected)
Master of Science in Computer Science in Graduate School of Arts & Sciences (GRS)	
Beijing Normal–Hong Kong Baptist University (BNBU), Guangdong, China	2020/09-2024/06
B.S.(Honors) in Computer Science of Hong Kong Baptist University	
Relevant Course Work: Object-Oriented Programming, Operating Systems, Algorithms, Computer Networks, Software Engineering, Data Streaming and Distributed Systems.	

Computer Skills

- Languages: Python, Java, Kotlin, C, C++, SQL, HTML, CSS
- Frameworks & Tools: Flask, Git, Json, FileZilla, Apache Flink, Apache Kafka, Docker, Kubernetes

Project Experience

Streaming and Event Driven System BU	2025/01-2025/05
<ul style="list-style-type: none">Improved a real-time defect detection system for laser powder bed fusion using Apache Kafka and Flink. Analyzed thermal grayscale images to identify saturated points and outliers, achieving 28× higher throughput and 7× lower latency than the baseline system implementation.Accepted Paper: <i>Real-Time Thermal Defect Detection in Additive Manufacturing with Apache Flink</i>. ACM International Conference on Distributed and Event-Based Systems (DEBS 2025), DOI: [10.1145/3701717.3735574].	
Operating System Develop BU	2024/09-2024/12
<ul style="list-style-type: none">Engineered a basic operating system leveraging Grub multiboot, featuring a FIFO thread scheduler with context switching and a simple file system supporting core operations. Debugging through GDB, using QEMU for testing, referenced resources like Puppy Linux, OSDev, and Intel documentation throughout the development process.	
Post-Graduation Information Web Portal Development (SDW) BNBU	2023/09-2023/12
<ul style="list-style-type: none">Collected and cleaned survey data from more than 700 students using Python, with integrated data visualization. Then designed a full-stack web application for post-graduation information retrieval using Flask, and SQL. Deployed on the university's FileZilla-based LAN server.	
High-Frequency Stock Market Anomaly Detection	2021/06-2022/01
<ul style="list-style-type: none">Created an algorithm based on S&P 500 index to detect market manipulation and dynamic anomalies, outperforming rule-based methods. Reduced sequence fluctuation error from 15% to 3%, with results closely aligned to NYSE Rule 48.Accepted Paper: <i>Auto Encoder Based = Abnormal Fluctuations Monitoring Method</i>. IEEE International Conference on Big Data, Information and Computer Network (BDICN 2022), DOI: [10.1109/BDICN55575.2022.00150].	

Relevant Experience

Software Engineer Intern China Mobile Co., Ltd.	2023 Summer
<ul style="list-style-type: none">Contributed to enhancing an invoice management system by developing workflow logic and optimizing a user interface using Python.Maintained and queried employee attendance databases for staff 1000+, in Excel and Office 365 tools for efficient data processing and record.	
Computer Vision Engineer Intern Vispect Intelligent Technology Company Limited	2022 Summer
<ul style="list-style-type: none">Implemented ADAS functionalities using OpenCV, including sensor data preprocessing and real-time object detection with YOLOv5 for traffic signals and road signs.Developed a Driver Drowsiness Detection module with audio and haptic alerts, enabling and test wireless related products connectivity.	

Leadership Experience

Middle School Student Care Plan Course Tutor	2021/01– 2023/08
<ul style="list-style-type: none">Give the Math, English subject academic support to the teenagers. From Junior high school to Senior high school(Y12-Y18). Population 50+ in one class.	