

Chloe Luo

qwluo@umich.edu | 585-656-0485 | [LinkedIn](#) | www.chloeqwluo.com/ | [GitHub](#) | NO SPONSORSHIP REQUIRED

EDUCATION

University of Michigan

Bachelor of Science in Computer Science, Mathematics and Statistics

- **Cumulative GPA: 3.75/4.0**

Ann Arbor, MI

Expected May 2026

PROFESSIONAL EXPERIENCE

Rising Wood (Stealth Startup)

Software Engineer Intern

San Francisco, CA

Jan 2024 – Aug 2024

- Developed a highly scalable, fault-tolerant ETL pipeline using **Python Django** in collaboration with 2 engineers to aggregate data from multiple sources, including vendor APIs, Reddit, news outlets, using Agile methodologies.
- Built scalable **RESTful APIs** with **Redis** on **AWS ElastiCache**, reducing response time for traders and enhancing data analysis performance.
- Leveraged **AWS EC2**, **Network Load Balancer (NLB)**, **API Gateway**, and **MongoDB** to achieve 99.99% uptime, ensuring high availability and fault tolerance of services.
- Implemented a real-time data ingestion service using **Kafka** and **MongoDB**, optimizing the aggregation and processing of popular news topics from social media.
- Optimized data processing with Python **asyncio**, improving throughput by efficiently handling concurrent I/O-bound tasks.
- Employed **test-driven development (TDD)** with **pytest** and **unittest** to ensure code quality, reliability, and maintainability.
- Integrated **Jenkins** and **CircleCI** for CI/CD, streamlining the development process and reducing time to market.

Black Pine Partners

Private Equity Analyst Intern

San Francisco, CA

Mar 2024 – May 2024

- Sourced over 50 SMB acquisition targets in cybersecurity and healthcare (equipment and services) with EBITDA between \$2M and \$10M, managed internal databases, and conducted initial due diligence

Tencent Games

Software Developer Intern

Shenzhen, China

Jun 2023 – Aug 2023

- Developed a scalable and secure RESTful APIs integrating the company's data library with on-premises and cloud systems; implemented robust **authentication** and role-based **authorization** mechanisms to ensure secure access.
- Employed **Object-Oriented Design** principles and applied relevant design patterns, such as **Observer** and **Factory**, to enhance maintainability and scalability.
- Built a WeChat bot for data scientists using Tencent **RPC**(Remote procedure call) and Python's **Selenium**, automating data extraction job submissions and improving user experience.
- Utilized **Go** concurrency, including **goroutines** and **channels**, to create a command-line interface that optimized download task submissions and automated Excel conversions, enhancing system efficiency.

SELECTED PROJECT

Inventory Management System Project

Independent Developer

Ann Arbor, MI

Jan 2024 – Apr 2024

- Engineered a scalable Java-based Inventory Management System using **Spring Boot**, **MySQL**, and **Hibernate**, implementing **RESTful APIs** for product information management.
- Improved system performance and reliability with asynchronous processing using Java's **CompletableFuture**, and conducted unit and integration testing with **JUnit** and **Mockito**.
- Deployed the application in Docker containers on Apache Tomcat, automated **CI/CD** with **Jenkins**, and established logging with **SLF4J/Logback** and real-time monitoring with **Prometheus** and **Grafana(Quality of Service QOs)**.

MapReduce & Search Engine Project

Student Developer

Ann Arbor, MI

Sep 2023 – Dec 2023

- Designed and deployed scalable, distributed search engines using algorithms like PageRank and TF-IDF, leveraging MapReduce for efficient data processing and creating segmented inverted indexes.
- Implemented scalable RESTful APIs for index management and query processing, utilizing SQL databases to enhance data retrieval and scalability.
- Developed front-end interfaces with JavaScript and React, integrating real-time search features.

SKILLS

C++, Python, JavaScript, Java, Go, SQL, MATLAB, Flask, Django, Spring Boot, React, Vue.js, Node.js, Spring Cloud, MySQL, Express.js, MongoDB, DynamoDB, Redis, Cassandra, Git, AWS EC2, RDS, ElastiCache, Kinesis, S3, SQS, Kafka