ZHENGLIN LI

📞 +86 153-9847-5433   ✉ lizhenglin2001@gmail.com   ⚫ github.com/ZhengLin-Li

EDUCATION

Sichuan University   **Sept. 2019 – Jun. 2023**
Bachelor of Science in Software Engineering, GPA: 3.8 / 4.0   *Chengdu, Sichuan, China*
Courses: Operating System, Data Structures & Algorithmic, Computer Networks and Distributed System, Database System and Information Management, Introduction to Software Engineering, Computer Organization and Architecture

WORKING EXPERIENCE

Microsoft   **Nov. 2022 – Present**
Software Engineer Intern, WebXT News & Feeds Core Ranking Team   *Beijing, China*
- Migrated a task execution engine, added Serilog as the logging component, and introduced TOML to support extensibility and simplicity of configuration, which accelerated the execution speed by more than 70%
- Develop a diagnostic system for ranking control using .NET Generic Host, which offers an in-depth analysis of ranking details. The system improves the productivity of R&D staff by 50%

Microsoft   **Jul. 2022 – Oct. 2022**
Software Engineer Intern, M365 Haas & Exchange Team   *Suzhou, Jiangsu, China*
- Developed a data query tool(RepairBox Data Query Tool) to help data center operations staff query and analyze hardware information of machines, improving their productivity by 50%
- Utilized Azure Synapse Analytics to analyze data in PySpark and persist results to Azure Blob Storage, using RESTful API on client side to trigger downloading, saving time more than 60% compared to the previous system
- Wrote PowerShell scripts on the client side to interact with users, using Microsoft Identity Platform and Azure Active Directory to authenticate user identity

ByteDance(TikTok)   **Apr. 2022 – Jul. 2022**
Software Engineer Intern, TikTok Open Platform Team   *Shenzhen, Guangdong, China*
- Developed a Lark robot using FaaS (function as a service) to automatically respond to the operation staff, letting them query information without writing SQL, which increased their response time by 60%
- Refactored three micro-service systems using Apache Thrift and Kitex (a micro-service framework in Go) to support more features, which introduced Redis thus reducing the CPU workload by 17% and database access by 29%
- Deployed the three distributed micro-service systems above online to ByteCloud (a cloud service like AWS). New features attracted 7% more PV(Page View) and 4% GMV(Gross Merchandise Value)

ENGINEERING EXPERIENCE

A Lightweight Key-value Storage Engine Based On SkipList   **Jul. 2022 - Dec. 2022**
- Implemented a lightweight key-value storage engine based on the SkipList according to the paper *Skip Lists: A Probabilistic Alternative to Balanced Trees*
- Adjusted details of the structure of SkipList referring to the implementation in Redis, which achieved better performance than which presented in the original paper by more than 10%
- In the condition of random read/write, the QPS of writing is 22w and QPS of reading is 16w

Zhi Qu - A WeChat Mini-app Helping Delivery-retrieval Faster   **Sept. 2020 - Oct. 2021**
- Designed an overall architecture of the WeChat mini-app, including frontend, backend, and Tencent cloud deployment
- Built the system using the APIs provided by the WeChat Open Platform with the cloud development environment
- Deployed and helped more than 4000 students in SCU to restive their delivery, providing service for more than 12 weeks

A Web-based Food Ordering System   **Jun. 2020 - Jul. 2020**
- Designed the architecture of a restaurant order management system, implemented it based on Spring Boot and MyBatis, and deployed the service to Alibaba Could within 4 weeks
- Utilized Redis, Kafka, and Elasticsearch as the middleware to optimize the performance, which saved the cloud computing cost by roughly 35% and speeds the response time by 70%

TECHNICAL SKILLS

Programming Language: C++, Go, Java, C#, Python, HTML/CSS, JavaScript, SQL, Bash, PowerShell
Technologies: AWS, Docker, MySQL, Redis, MongoDB, SQLite, Elasticsearch, Kafka, Git, Linux
Framework: Django, React, Spring Boot, MyBatis, Maven, Node.JS

EXTRACURRICULAR AND LEADERSHIP

SCU Computer Science Club   **Sept. 2020 - Aug. 2021**
Vice President   *Sichuan University*
- Organized a programming contest at Sichuan University, attracting more than 20 teams(100 students)
- Delivered a speech on the history of the tech industry in China during the club's regular seminar
- Support president to lead the club of 30+ members and won the title of the outstanding club in SCU of 2021

AWARDS AND INVOLVEMENT

Microsoft Global Hackathon 2022	**2022**
Top 3%, Tianchi Big Data Competition	**2022**
Outstanding Student	**2021**
First-Class Scholarship	**2021**
Third Prize, The 14th China Software Design and Application Competition	**2020**
Outstanding Prize, College Students' Innovative Entrepreneurial Training Plan Program	**2020**