# YiPeng Li

St. Louis, MO | yipeng.li666@gmail.com | 929-988-1692 | linkedin.com/in/yipeng-li-557594235 | https://github.com/Lazytodie11

## EDUCATION

**Washington University in St. Louis**                                                                     **St. Louis, MO**
M.S in Computer Science                                                                                     **Expected: May 2026**

**Drew University**                                                                                                **Madison, NJ**
B.S. in Computer Science                                                                                       **Aug 2021 -May 2023**

## SKILLS

- **Languages:** Python, Java, C++, Swift
- **Frameworks / Tools:** React, Springboot, Flask, UIKit, TensorFlow, Mockito, AWS EC2
- **Databases:** Oracle, MySQL, Redis

## PROFESSIONAL EXPERIENCE

**VisionX**                                                                                                        **San Jose, CA**
Software Engineer Intern                                                                                       **May 2025 - July 2025**

- Contributed to the development of RingX cross-platform mobile app supporting blood pressure, $SpO_2$, heart rate, and pace tracking for 5,000+ elderly users, enabling caregivers to monitor health data in real time.
- Expanded and optimized a relational **SQL** database by designing and integrating 10+ new tables ($SpO_2$, heart rate, sleep), normalizing schema, and adding indexes, reducing overall query latency by 30%.
- Implemented RESTful back-end APIs with **Django**, including: Real-time $SpO_2$ alert API delivering threshold warnings to caregivers; Analytics API generating weekly blood pressure and heart rate reports.
- Built cross-platform UI pages with **Flutter** (login, feedback, charts), ensuring a consistent and responsive experience across **iOS** and **Android**.
- Integrated **Apple HealthKit API** to retrieve step count, heart rate, and sleep data, synchronizing with the internal database to provide comprehensive health insights.
- Monitored production logs and analyzed error patterns, improving system stability and reducing downtime.

**Tencent**                                                                                                      **Shenzhen, China**
Software Engineer Intern                                                                                       **May 2023 - Aug 2023**

- Developed and optimized an internal document management system for secure and efficient file transfers, including PDFs, spreadsheets, datasets, and images.
- Enhanced document security by implementing **secure HTTPS** communication protocols using **Flask (Python),** ensuring encrypted data transfer and secure interactions. Utilized parameterized queries to securely interact with **MySQL**, preventing SQL injection attacks. Additionally, implemented secure file storage solutions on Tencent Cloud (CVM/COS), significantly improving reliability and confidentiality of internal documentation.
- Drove adoption, attracting approximately 300 internal users across the organization.
- Optimized database queries by implementing indexing strategies and refactoring table joins, reducing server response time by 20%.
- Implemented **LSTM-based (Long Short-Term Memory)** machine learning recommendations to personalize onboarding experiences and boost user engagement.
- Improved data retrieval performance, streamlining workflows and enhancing system efficiency for internal staff.

**Alibaba Group**                                                                                              **Hangzhou, China**
Software Engineer Intern                                                                                       **Feb 2023 - Mar 2023**

- Developed and maintained an internal company shopping website for commemorative items and custom-designed products, providing service to approximately 500 internal users.
- Designed, implemented, and optimized database schemas using **MySQL** and integrated via **Java Spring Boot APIs**, to efficiently support coupon features, enabling robust and scalable employee discount programs.
- Built RESTful APIs using **Java Springboot** to streamline coupon management and ensure seamless system integration.
- Implemented image caching, storing product images in cache upon user load to improve performance and enhance user experience.
- Conducted rigorous testing with **Mockito**, achieving 80% test coverage and ensuring system reliability.

## PROJECTS

**iOS Event Management App (Capstone)**                                                            **Sep 2024 – Jan 2025**

- Developed a full-stack event management app with **Swift (UIKit)** on the frontend and a custom Python socket server backend hosted on **AWS EC2**.
- Implemented core features including event publishing, image selection (via **PHPickerViewController**), map-based location display (**MapKit**), and event detail views with interactive UI updates.
- Managed event and user data with **MySQL**, optimized queries using indexing and simplified joins to improve performance under concurrent requests. Secured user data and login credentials using bcrypt for password hashing and parameterized SQL queries with pymysql to prevent SQL injection.
- Enabled image upload and retrieval via custom HTTP handlers, storing image files on the **EC2** server and returning public access URLs to the frontend.
- Integrated URLSession on the frontend for network communication, with robust error handling and JSON decoding for seamless user interaction.