

# Quanyong Bi

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<https://quanyongbi.github.io/>

## EDUCATION

University of Southern California (USC)

Bachelor of Science in Computer Science and Business

Master of Science in Computer Science

GPA: 3.8/4.0

Los Angeles, CA

Aug 2020 - Dec 2024

Expected: Spring 2025 – Spring 2026

- **Relevant Coursework:** Computer System, Machine Learning, Data Structures, Algorithms, Computer Security, Software Development, Discrete Mathematics.

## PROFESSIONAL EXPERIENCE

OinAuto

Full-stack Developer Intern

Irvine

May 2024 – Aug 2024

- Led a team of 10 interns to upgrade the internal interns management system from static PHP to a modern **Django + React + Nginx** framework, improving system performance and scalability.
- Incorporated generative AI for resume modification and creation as a new feature in interns projects, and integrated external APIs to implement personalized job recommendation systems.
- Contributed to a traffic safety monitoring project by researching **Single Shot Detection**, resulting in the development of a customized model with 80% mean Average Precision (mAP) for fast and accurate object detection.

Hotland LLC

Android Developer Intern

Los Angeles

Jan 2023 - May 2023

- Enhanced app usability by 40% and increased daily active users by 25% within three months post-launch, by designing and implementing a user-friendly interface using **Kotlin** and **Jetpack Compose** for an Android VPN management app.
- Achieved a 99.9% error-free communication rate and significantly improved app reliability by engineering robust **RESTful API** integrations for real-time synchronization with remote servers.
- Led the development of an Android VPN management application on the **V2Ray** platform, streamlining user experiences in purchasing, configuring, and managing VPN services.

## PROJECTS

SiKi

May 2024 – Present

- Developed a cross-platform inventory management and recipe recommendation system using **Django** and **Flutter**.
- Designed and managed a **PostgreSQL** database, integrated REST Framework for API endpoints.
- Planned future integration with **Docker** for containerization, **Nginx** for scalable web serving, and **AWS** for cloud deployment, emphasizing a scalable, maintainable, and secure architecture.

Austin - A Message Pushing Platform

Jul 2023 – Dec 2023

- Developed a Message Distribution platform using **Spring Boot**. Enable users to send and manage message batches through various platform including emails, SMS, slack and other social accounts.
- Increased data handling efficiency by at least 40% and ensured a 99.9% message delivery success rate by architecting a **Kafka**-based request handling system.
- Optimized request performance during peak hours and reduced costs in off-peak hours by developing dynamically configurable thread pools with **Apollo**, adapting to industrial workload variations, and enhancing system responsiveness.
- Minimized duplicate message deliveries by engineering advanced deduplication logic using **Redis**, which included designing content and frequency-based deduplication strategies for real-time processing.

## TECHNICAL SKILLS

- **Programming Languages:** Python, Java, Kotlin, C++, Swift, Javascript
- **Tools and Frameworks:** Spring Boot, Django, Flutter, C++, Flask, Redis, PyTorch, React, Node.js, Git, Jetpack Compose, MySQL, SQLite, PostgreSQL AWS, Android Studio, Docker, Ruby.