

# Zhaoyu Wang

Interests: large-scale distributed cloud computing, DBMS, Data Infra

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## EXPERIENCE

**ByteDance/TikTok** | SOFTWARE ENGINEER II | JUN. 2023 - PRESENT

### Global Monetization

- Participated in **Brand Innovation Ads Delivery** team as Backend Software Engineer
- Supported scalable and low-latency (~ 1s) Ads Delivery pipeline handling **1M+** RPS
- Scaled Reach & frequency models on ML platform serving millions TikTok Ads

### Global E-Commerce

- Participated in **GEC Merchandise Supply** team as Backend Software Engineer
- Designed and built supply system improving **5M+** product growth from scratch
- Led and launched global supply in **multi-DC** to connect **100k+** SMB at scale
- Collaborated with **XFN** stakeholders across orgs, like EM, DS, PM, PMM, etc.
- Implemented supply core workflows by **Go, Thrift Rpc, Eventbus, RDS, and ES**

**Booking.com** | SOFTWARE ENGINEER | APR. - AUG. 2022

- Participated in **Partner Offer Infra** team as Infrastructure Software Developer
- Maintained **99.95%** availability SLO for Booking Third Party Inventory architecture
- Supported Availability Cache System to tolerate **150k+** RPS for real-time full traffic
- Migrated Pricing Platform to reach **70ms** latency on Search Result and Hotel Page
- Initiated incubator framework to host **Kafka** streaming consumers and cron tasks

**Wish Inc.** | SOFTWARE ENGINEER | OCT. 2020 - APR. 2022

- Participated in **WishPost Logistics Product** team as Full Stack Software Eng.
- Built logistics platform to connect **600k+** merchants and **400M+** customers
- Maintained and monitored **2k+** peak RPS order APIs by **Prometheus** and **Grafana**
- Implemented logistics core APIs using **Python, MongoDB, Redis, and AWS SQS**
- Deployed **ETL** data pipeline via **Airflow, Hive, and Presto**, and sinked in **AWS S3**

**Grab Inc.** | SOFTWARE DEVELOPER INTERN | JUL. - SEP. 2020

- Participated in **Geo Debugging Tools** team as Full Stack Software Eng.
- Built **GrabMap** features and achieved **2.5k+** monthly debugging, **140k+** searches

## PROJECTS

**Compiler of EtaLang** | JAVA, COMPILER | JAN. - MAY. 2023

- Built a compiler for Eta, a strongly-typed, C-like language compiles down to x86-64 assembly from lexer, parsing, type-check, IR-gen to assembly code-gen
- Performed dataflow analysis to support multiple optimizations, like register allocation, constant & copy propagation, dead-code elimination, etc.

**Distributed Gossip** | PYTHON, MULTIPROCESS, SOCKET | SEP. 2022

- Designed and implemented a distributed **pull-mode** gossip protocol from scratch, supporting gossip-node table, blocking blacklist, adversarial gossip, etc.

## SKILLS

### LANGUAGES & FRAMEWORKS

Go • Python • Java • C++  
JavaScript • SQL • LaTeX  
Spring Boot • Tornado • Flask

### STORAGES & MIDDLEWARES

MySQL • PostgreSQL • Redis  
MongoDB • Cassandra • Kafka  
Prometheus • Graphite • Hive  
Flink • Presto • Elasticsearch  
Clickhouse

### INFRASTRUCTURE & TOOLS

Kubernetes • Docker • Git  
AWS • GCP • Linux • Airflow  
Grafana • Kibana • Sentry

## EDUCATION

### CORNELL UNIVERSITY

MASTER OF ENGINEERING IN  
COMPUTER SCIENCE  
**May. 2023** | Ithaca, NY  
Bowers College of Computing  
and Information Science  
**GPA: 3.74 / 4.0**

### UNIVERSITY OF MINNESOTA, TWIN CITIES

BACHELOR OF SCIENCE IN  
COMPUTER SCIENCE  
**May. 2021** | Minneapolis, MN  
College of Science and  
Engineering  
**GPA: 3.97 / 4.0** | Highest  
Distinction