

GUANCHEN ZHAO

Seattle, Washington, USA

✉ gczhao@uw.edu [in linkedin.com/in/gczhao](https://www.linkedin.com/in/gczhao) [🌐 gczhao.cn](https://www.gczhao.cn) github.com/zhaoguanchen

EDUCATION

University of Washington

WA, USA

Master of Science, Computer Science and Systems

Sep. 2020 – Mar. 2022

University of Science and Technology Beijing

Beijing, China

Bachelor of Engineering, Computer Science and Technology

Sep. 2014 – Jul. 2018

TECHNICAL SKILLS

Languages: Java, Python, C, HTML/CSS, JavaScript, SQL

Developer Tools: AWS, Google Cloud Platform, VS Code, Eclipse, IntelliJ IDEA

Technologies/Frameworks: Linux, Kubernetes, Docker, Springboot, GitHub, JUnit

EXPERIENCE

Yuanbao Group

Dec. 2019 – Aug. 2021

Senior Software Engineer

Beijing, China

- Led a team consisting of 7 engineers to implement from scratch and successfully launch the firm's first Strategy Distribution Engine – Themis, a smart strategy engine based on traffic flow and predicate conditions' strategy, which provides handy service for vendors and consumers.
- Designed architecture of native service mesh cloud app on top of Golang backend services, using MySQL and Redis as high-performance database, Prow, Bazel as CI/CD, Hive, ClickHouse as data statistics and AWS by K8s + Istio as deployment environment.
- Themis ecosystem managed to accumulate 200 million users within 10 days of its release to the public, with delivery rate above 97, daily peak value over 5000k and online connections averaged 10k-15k QPS.

Bitauto Holdings Limited

Jul. 2018 – Nov. 2019

Senior Software Engineer

Beijing, China

- Participated in an Online Office System project with 1000+ active daily users.
- Used Shiro to solve user authentication and authorization problems.
- Utilized JWT(JSON Web Token) to fulfill a single sign-on function.
- Constructed message notification module by RabbitMQ to reduce MongoDB's pressure.

PROJECTS

Staff Management System | Backend

Nov. 2021 – Jan. 2022

- Constructed the micro-services framework using Springboot.
- Implemented a programmatic gateway called Faraday for dynamic routing requests to services with Servlet Filter.
- Built authentication and authorization with JWT token and Faraday gateway.
- Deployed the project with Docker Compose and Amazon EKS.

Online Shopping System | Backend

Feb. 2020 – Mar. 2020

- Solved high requests per second(rps) issues using Redis for cache preheating, RocketMQ for peak load shifting.
- Avoided over-sell using Lua CAS scripts combining Redis and MySQL Optimization Lock.
- Obtained high availability using Sentinel to do rate limit, flow control and circuit breaker.
- Stress test result implemented by JMeter showed the system supports 10000 rps.