

# Dezhi Yu

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## EDUCATION

### Carnegie Mellon University, Electrical and Computer Engineering

Master of Science in Software Engineering;

### Huzhou University, School of Information and Engineering

Bachelor of Science in Computer Science; GPA: 3.75/4.0; Ranking: Top-3

Silicon Valley, CA, United States

Sep 2021 – Dec 2022 (expected)

Huzhou, Zhejiang, China

Sep 2009 – Jun 2013

## TECHNICAL SKILLS

**Languages:** Go, Objective-C, JavaScript, Node.js, C, C++, Java, Python, Shell, SQL, HTML, CSS

**App Technologies:** Weex, React Native, Flutter, Cordova, ReactiveCocoa, MVVM, MVP, JSPatch, Realm, SQLite

**Front-End Technologies:** Vue, Electron, ES6, Express, Meteor

**Back-End Technologies:** Docker, Linux, gRPC, Apache Thrift, Protobuf, Beego, Kafka, Redis, MySQL, PostgreSQL, Hive, Spark, Blink, Phabricator, Git, Jenkins, GraphQL, Kubernetes, Krew, Helm, Istio, Envoy, Prow, Bazel, AWS Cloud

## PROFESSIONAL EXPERIENCE

### Binance.com

Staff Engineer

Singapore

May 2021 – Oct. 2021

- 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.

### Alibaba Group

Senior Backend Engineer | Senior Research & Development Engineer

Shanghai, China

Feb 2017 – Jun 2020

- Led team of 5 engineers to build Taco ecosystem, including Taco (a distributed Golang-based message streaming platform, serving 300 million users and 20 third-party partners), Taco-cli (deployment tool), Taco-console (cost calculation and analytics service), and Taco-SDK (suite of templates for iOS/Android/H5).
- Enriched Taco ecosystem by implementing Taco V2, an Infura-like, API gateway on top of Golang backend services, using MySQL and Redis as high-performance database, RabbitMQ and Kafka for messaging queue, Hive, Blink and Elasticsearch as data statistics and message pipeline query, gRPC, Apache Thrift and HTTP as communication protocol.
- Taco ecosystem successfully handles 400 million+ push notifications per day, with delivery rate above 90% and delivery time of 1.72-2.2 seconds; daily peak value can reach 550k online connections with 20k-30k QPS.

### Shanghai Fangchuang Financial Information Service Co., Ltd.

iOS Team Leader

Shanghai, China

May 2016 – Feb 2017

- Led engineer team to develop 2nd version of iOS app Func, a product to help investors find and fund the most innovative start-ups; mainly responsible for technology architecture design, MVVM architecture reconstruction, Realm database replacement, instant messaging module migration and UI rewriting.
- Worked closely with clients in investment banking and legal industries to collect user feedback and develop new features; actively used Bugtags to monitor user behavior, optimize experience.

### Shanghai Ping An Smart Technology Co., Ltd.

Senior iOS Engineer

Shanghai, China

Nov 2015 – Apr 2016

- Mainly responsible for development of 1QB Wallet hybrid plug-in, using Cordova to develop payment plug-in for the 1QB Wallet app client, burying points to count user behavior.
- Working in team building new Code Review platform; developed H5 webpack package deployment and remote backup distribution platform, including Jenkins integrated static code scanning on daily basis and CI/CD pipeline.

## Quatanium Technology Co., Ltd.

Junior iOS Engineer

Shanghai, China

Jun 2013 - Nov 2015

- Implemented and launched firm's first iOS application from scratch: Qhome, a smart home client, provides easy-to-use home automation solutions for businesses and consumers; took charge of camera research and development (Foscam, Haikang, WRT access control plug-in), real-time viewing, intercom, playback, etc.
- Improved fluency by 30%, reduced power consumption by 20% and network disconnect by 40% via Instrument (Core Animation, Time Profiler, Energy Diagnostics, Network) Optimization method.
- Processed user Crashlog with third-party crash logging tool Crashlytics and official TestFlight; used Flurry to monitor user behavior and collect data for background data mining.

PROJECTS (ALL IN GITHUB: @HALFROST, WORLD STAR RANKING: [149](#), WORLD FOLLOWERS RANKING: [95](#))

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**LeetCode-Go (22.4K star)**: Book on LeetCode solutions in Go, featuring 100% test coverage, runtime over 100%. Book has won praise from PhDs, staff from CMU/Google/Apple/Microsoft/Facebook/Amazon, etc. Following release on 13th August, 2020, it occupied Github trending top-10 for 2 consecutive months, attracting 0.74 million Words, cumulative Page Views of 3.19 million, 1.21 million Unique Visitors, 123K PDF downloads. [[Github Link](#)]

**Halfrost-Field (10.4K star)**: Personal technology blog, cumulative 5.37 million page views, 2.18 million unique visitors, 0.78 million words; blog is well known among Chinese developers. [[Github Link](#)]

**vue-objccn (2.0K star)**: Used Vue.js to develop cross-platform full stack application, 2.7K downloads. [[Github Link](#)]

**threes-ai**: Deep Reinforcement Learning for the Threes! game. [[Github Link](#)]

**Prometheus**: A Clean And Modern Ghost Theme with Progressive Web Apps (PWA), 584 theme downloads. [[Github Link](#)]

## HONORS AND AWARDS

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**2020** Association for Computing Machinery; Professional Membership

**2020** Institute of Electrical and Electronics Engineers Computer Society; Member

**2020** China Computer Federation; Member

**2016** Best Original Authors Juejin.im; Top-10 Author

**2016** Best Recommended Author of Jianshu; Best Technology Author

**2012** Computer Technology Software Professional Qualification Certificate; Intermediate Network Engineer

**2012** National Computer Rank Examination; Level 4 Network Engineer

**2011** 36th ACM-ICPC Asia Regional Contest Shanghai Site 2011 Fudan University; Bronze Medal

**2011** Google Cup 2011 ACM-ICPC China Shanghai Fudan Invitational Programming Contest; Bronze Medal

**2011** 8th College Student Program Design, Zhejiang Province; Bronze Medal

**2011** Computer Technology and Software Professional Qualification Certificate; Intermediate Software Designer

## TALKS AND PRESENTATIONS

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**Alibaba Knowledge Share** | Lecturer

Aug 2018 – Jan 2019

• Introduced SegmentTree data structure in ACM-ICPC and application of SegmentTree. [[Presentation](#)]

• Introduced Functional Reactive Programming and its impact on programming thinking. [[Presentation](#)]

**Swiftgg Code<T> Salon** | Senior Lecturer

Apr 2018 – Jun 2018

• Application of spatial index in geographic service, Introduced Efficient multi-dimensional spatial point indexing algorithm — Geohash and Google S2, and application of spatial index in geographic service. [[Presentation](#)]