# Dezhi Yu

i@halfrost.com | (+86) 15000049165 | https://halfrost.me | LinkedIn: @half-frost | Github: @halfrost

#### **EDUCATION**

## **Huzhou University, School of Information and Engineering**

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

Huzhou, Zhejiaing, China Sep 2009 – Jun 2013

# PROFESSIONAL EXPERIENCE

Alibaba Group Shanghai, China

Senior Back End Engineer | Senior Research & Development Engineer

Apr 2018 – 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.

ele.me Shanghai, China

Senior iOS Engineer

Feb 2017 – Apr 2018

- Developed iOS application Talaris, aggregated same-day delivery platform for internal and third-party retailers using JavaScript, Objective-C and Ruby; took charge of building better scalability and performance across both Weex and Native application layers. Application's monthly active users reached 90k.
- Responsible for MVVM architecture design, routing design and API convergence management. Successfully decreased crash rate from 7/10000 to 3/10000; optimized network layer, power and application fluency performance.
- Training new engineers on MVVM architecture expertise; communicating with external deliveryman; discussing multiple-time technical topics within team.

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

Shanghai, China

iOS Team Leader

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.

Shanghai, China

Senior iOS Engineer

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.

Shanghai, China

Junior iOS Engineer

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: 330, WORLD FOLLOWERS RANKING: 286)

**LeetCode-Go** (10.0K 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 2.14 million, 1.06 million Unique Visitors, 72K PDF downloads. [Github Link]

**Halfrost-Field** (6.9K star): Personal technology blog, cumulative 3.33 million page views, 0.87 million unique visitors, 0.58 million words; blog is well known among Chinese developers. [Github Link]

vue-objccn (1.9K star): Used Vue.js to develop cross-platform full stack application, 2.6K 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), 547 theme downloads. [Github Link]

#### **HONORS AND AWARDS**

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	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

#### 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]

#### **TECHNICAL SKILLS**

Languages: Go, Objective-C, JavaScript, C, SQL, HTML, CSS App

**Technologies:** Weex, ReactiveCocoa, MVVM, JSPatch, Realm, SQLite **Front-End Technologies:** Vue, Electron, ES6, Express, Meteor, gRPC

Back-End Technologies: Docker, Linux, Beego, Kafka, Redis, MySQL, PostgreSQL, Hive, Spark, Blink, Phabricator, Git,

**Jenkins**