

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, 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](#))

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

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

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](#)]