

# Mengjue Tan

Tel: (401)867-0857 | E-mail: [ivorymengjue@gmail.com](mailto:ivorymengjue@gmail.com)

28 Hope Street, Apt 2, Providence, RI, 02903

## EDUCATIONAL BACKGROUND

**Brown University**, Providence, US

**GPA: 4.0/4.0**

Sep. 2022 - Dec.2024

**Program:** Master of Computer Engineering

**Core Courses:** Computer Systems, Scientific Computing in C++, Distributed Computer Systems, Deep Learning, Computer System Security, Pattern Recognition and Machine Learning

**Fudan University**, Shanghai, China

Sep.2018 - Jul.2022

**Program:** Bachelor of Artificial Intelligence

**Core Courses:** Programming, Data Structure and Algorithm Design, Network protocol and network security, Statistical Learning, Database and Data Warehouse System, Robotics, Image Processing and Machine Vision, Natural language processing, Computer Vision

## WORK EXPERIENCE

**Backend Developer Intern**, Tencent Technology Co. Ltd, China

Jul.2023 - Jan.2024

- Contributed to backend development for **Tencent Hunyuan Assistant**, a ChatGPT-like AI multimedia chatbot, serving millions of users on web and WeChat Mini Program platforms.
- Implemented RESTful APIs in **Golang** for seamless communication between frontend and backend, leveraging **Docker** and **Kubernetes** for scalable CI/CD pipelines.
- Managed conversation and user shortcuts data with **MongoDB**, established top-level service with **Redis** and Cache for system token storage and replacement, and utilized **COS** (Cloud Object Storage) for multimedia resources storage and access control.
- Participated in developing Hunyuan Text-to-Image Platform, collaborating on the implementation of conversation, user feedback, and image refinement interfaces.
- Supported **Data Flywheel** Project, utilizing **Apache Flink** for real-time data processing to rapidly iterate algorithm models based on user feedback, integrating with **MySQL** for efficient data storage and retrieval.

## PROJECTS

**Modular Distributed System**

Feb.2022 - Apr.2022

- Implemented a distributed hash table based on the Tapestry algorithm for routing and data storage between nodes, providing efficient distributed data management with support for dynamic node joining and leaving.
- Utilized the Raft consensus protocol for node replication and log synchronization, ensuring system consistency and reliability with fault recovery and data persistence support.
- Leveraging Golang's goroutines and channels for concurrent request and response handling, ensuring efficient and stable system operation.
- Employed Golang's network library and RPC for inter-node communication and data transmission, ensuring system reliability and consistency.

**Yelp Camp - Camping Site Review Website**

Jun.2022 - Aug.2022

- Designed and developed a full-stack web application for reviewing and searching camping sites, featuring user authentication, campsite listings, and review functionalities, resulting in a comprehensive camping site review website simulation.
- Utilized modern web development technologies, including Node.js, Express, and MongoDB, to create a dynamic and user-friendly interface that facilitated seamless user interaction and data management, enhancing user experience and website performance.

## SKILLS

**Programming/Scripting Languages:** Golang, Python, C++, Java, JavaScript, HTML, CSS, SQL

**Databases and Frameworks:** MySQL, MongoDB, Redis, PostgreSQL, Apache Flink, Apache Spark

**Dev Tools:** Docker, Kubernetes, Git