

EDUCATION

Shanghai Jiao Tong University

M.Eng. in Software Engineering

Shanghai, China
Sep. 2019 – Mar. 2022 (Expected)

Shanghai Jiao Tong University

B.Eng. in Software Engineering

Shanghai, China
Sep. 2015 – Jun. 2019

PUBLICATIONS

- [1] **Yuchen Cheng**, Chunghsuan Wu, Yanqiang Liu, Rui Ren, Hong Xu, Bin Yang, and Zhengwei Qi. 2020. *OPS: Optimized Shuffle Management System for Apache Spark*. In 49th International Conference on Parallel Processing - ICPP (ICPP '20). (CCF-B)

EXPERIENCE

LFX Mentorship by The Linux Foundation

Mentee Remote
Feb. 2021 – Present

- **volcano-sh/volcano**. Volcano is a Kubernetes native batch scheduling system for compute-intensive workloads. My work includes building an efficient testing framework based on Kubernetes and importing unit tests and E2E tests to cover more classical scenarios.

JD.com

Software Development Engineer Intern

Shanghai, China
Jun. 2018 – Sep. 2018

- **JingZao**. Rewrite module JingZao with React Native and introduce several sections in Objective-C.

PROJECTS

CaseCloud

May. 2019 – Present

- A cloud native electronic platform for bankruptcy process management, with a trillion renminbi-level claims processing.
- Responsible for the management of development process and build an efficient GitOps pipeline with Kubernetes and Tekton.
- Design and implement the user interface with TypeScript and React, and manage the dataflow with Redux.
- Build a message broker with Apache Kafka on Kubernetes using Strimzi, and implement a gRPC-based message center.

OPS

Sep. 2019 – Feb. 2020

- A distributed computing shuffle management system based on Spark, taking over and optimizing the shuffle phase of Spark.
- *Early-merge* intermediate data to mitigate intensive disk I/O, *early-schedule* based on partition pages, and *early-shuffle* intermediate data stored in shared memory.
- Optimize the overhead of shuffle by nearly 50%, and improve end-to-end completion time by nearly 30% on average in the test cases of HiBench.

SERVICE

Shanghai Jiao Tong University

Teaching Assistant

Shanghai, China
Autumn 2018, Spring 2019, Autumn 2019, and Summer 2020

Dongyue Web Studio, Shanghai Jiao Tong University

Leader of Team iOS

Shanghai, China
Dec. 2016 – Dec. 2019

- **Tongqu for iOS**. The official platform of activities for students in Shanghai Jiao Tong University, on which thousands of students have joined in the activities. My work includes development and maintenance.
- **dyweb/go-jaccount**. The Golang client for jAccount, the unified identity authentication system of Shanghai Jiao Tong University.

PROGRAMMING SKILLS

Languages: Go, TypeScript, JavaScript, Java, Python, C++, Swift

HONORS AND AWARDS

The Second Prize in Taiwan Student Scholarship

Mar. 2021

The Second Prize in Taiwan Student Scholarship

Dec. 2018

The Third Prize in Taiwan Student Scholarship

Dec. 2017

MISCELLANEOUS

- **GitHub**: <https://github.com/rudeigerc>
- **LinkedIn**: <https://www.linkedin.com/in/rudeigerc/>
- **Open Source Contributions**: Member of **Tekton**. `tektoncd/cli`, `tektoncd/triggers`, `tektoncd/dashboard`, `strimzi/strimzi-kafka-operator`, `volcano-sh/volcano`