## Yu-Chen CHENG

https://rudeigerc.dev

**EDUCATION** 

Shanghai Jiao Tong University

Shanghai, China

M.Eng. in Software Engineering

Sep. 2019 – Mar. 2023

E-mail: rudeigerc@gmail.com

Thesis: Distributed Data Processing Job Scheduling in Multi-Tenant Shared Clusters

Shanghai Jiao Tong University B.Eng. in Software Engineering

Shanghai, China

Sep. 2015 – Jun. 2019

EXPERIENCE

WizardQuant Shanghai, China

May. 2023 – Present

AI Platform Development Engineer

Shanghai, China Jun. 2021 – Sep. 2021

Ant Group Site Reliability Engineer Intern

• Identity Provider Connector. Led the development of the Dex identity provider plugin connecting to the internal identity and access

management system. The connector provided OIDC services for internal systems such as Argo CD and Grafana.

• Federation Observability Platform. Participated in the design and development of the internal multi-clusters observability platform.

The Linux Foundation Mentee of LFX Mentorship Program Remote

Feb. 2021 - May. 2021

• volcano-sh/volcano. Built an efficient testing framework based on Kubernetes and imported unit tests and E2E tests to cover more classical scenarios for Volcano, a Kubernetes native batch scheduling system for compute-intensive workloads.

JD.com

Shanghai, China Software Development Engineer Intern

Jun. 2018 – Sep. 2018

• JingZao. Rewrote module JingZao with React Native and introduced several sections in Objective-C for JD.com mobile application.

SELECTED PROJECTS

## Moirai: Distributed Data Processing Job Scheduling in Multi-Tenant Shared Clusters

Sep. 2021 - Dec. 2022

- · Built a scheduler aiming to improve the resource utilization of multi-tenant shared clusters for distributed data processing jobs with Kubernetes scheduling framework.
- Unified Multi-Tenant Abstraction Model: Designed a model providing abstraction and binding relationships between tenants and jobs.
- · Multi-Tenant-Oriented Scheduling System for Jobs: Designed a mechanism of scheduling based on placement constraints and resource sharing.

## **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).

SERVICES

## Shanghai Jiao Tong University

Shanghai, China

Teaching Assistant

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

Programming Skills

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

Tools and Frameworks: React, Kubernetes

Honors and Awards

The Second Prize in Taiwan Student Scholarship

Dec. 2018, Mar. 2021 and Oct. 2021

The Third Prize in Taiwan Student Scholarship

Dec. 2017

Miscellaneous

GitHub: https://github.com/rudeigerc

LinkedIn: https://www.linkedin.com/in/rudeigerc/

Selected Open Source Contributions: Member of Tekton and Tensorchord. tektoncd/cli, tektoncd/triggers, tektoncd/dashboard, strimzi/strimzi-kafka-operator, volcano-sh/volcano, tensorchord/envd

Last updated: May 8, 2023