Yu-Chen CHENG

https://rudeigerc.dev

EDUCATION

Shanghai Jiao Tong University

Shanghai, China

Sep. 2019 – Mar. 2023

E-mail: rudeigerc@gmail.com

M.Eng. in Software Engineering

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 AI Platform Development Engineer

#Kubernetes #Go #Python #Ray #React #Vue

Shanghai, China

May. 2023 – Present

Ant Group

Site Reliability Engineer Intern

Shanghai, China Jun. 2021 – Sep. 2021

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

#KUBERNETES #GO #REACT

The Linux Foundation Remote

Mentee of LFX Mentorship Program, CNCF - Volcano

Feb. 2021 – May. 2021

• System Stability Enhancement. 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.

#KUBERNETES #GO

ID.com

Shanghai, China

Software Development Engineer Intern

Jun. 2018 – Sep. 2018

• JingZao. Refactored module JingZao with React Native and introduced several sections in Objective-C for JD.com mobile application. #OBJECTIVE-C #REACT NATIVE

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

Dongyue Web Studio, Shanghai Jiao Tong University

Shanghai, China

Leader of iOS Team

Dec. 2016 - Dec. 2019

Programming Skills

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

Topics: Resource Management, Scheduling

Tools and Frameworks: Kubernetes, Ray, React, Vue

LICENSES AND CERTIFICATIONS

Honors and Awards

The Second Prize in Taiwan Student Scholarship, Ministry of Education, P.R.C. The Third Prize in Taiwan Student Scholarship, Ministry of Education, P.R.C.

Dec. 2018, Mar. 2021 and Oct. 2021 Dec. 2017

Miscellaneous

GitHub: https://github.com/rudeigerc

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

Languages: Chinese (Native proficiency), English (Professional working proficiency), Japanese (Limited working proficiency)

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: March 27, 2024