

RUSTIN LIU

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👤 WORK EXPERIENCE

PingCAP Inc.

Aug 2020 – Present

(Database R&D) TiCDC R&D

- Rewrites TiCDC core data synchronization process, modifying the original push mode to pull mode to optimize memory management and data synchronization process. Provides more flexible task-level memory control, greatly improving OOM issues and throughput.
- Rewrote the TiCDC Sink module to remove a lot of useless and harmful abstractions, changed from synchronous mode to asynchronous mode, and optimized code performance to improve throughput by 30%.
- Responsible for supporting the Multi-Topic feature for TiCDC Kafka Sink, allowing it to send data messages to multiple Topics based on table information.
- Responsible for refactoring all of TiCDC's CLI code, removing a lot of global variables and dead code, standardizing how commands are added and written, and greatly improving maintainability.
- Ported the project's integration tests to Docker so that they could run locally, greatly improving development efficiency. I also optimized the test scripts and reduced CI time consumption from 40 minutes to 20 minutes.

(Community Front-end and Back-end R&D) TiChi R&D

- Responsible for designing and building the entire project, building collaborative robots on GKE using Prow.
- Fixed bugs and added features for Prow, submitted 39 PRs.

Morningstar, Inc.

June 2019 – July 2020

(Front-end and Back-end R&D) Components

- Responsible for writing and maintaining some components, developed using springboot and Vue. Several components are already online, with good stability and performance.
- Responsible for designing the tracking system design and implementation, using HeapIO to track user information, with a scalable interface to seamlessly switch to Google Analytics.
- Wrote automated Jenkins scripts for component and document releases, optimizing the release process from a manual 4-hour process to a fully automated 30-minute process.
- Optimized the company's front-end scaffolding to support TypeScript, added prettier to unify code formatting, and unify ESLint rules.

🎓 EDUCATION

Software Engineering Bachelor's Degree

Sep 2015 – June 2019

- Chongqing University of Technology

🐱 OPEN SOURCE PROJECTS

Cargo & Rustup

<https://github.com/rust-lang>

(Active Maintainer) 260+ commits

- Improved various error prompts for Rustup and Cargo commands to make errors to effective and clear.
- Added the `-crate-type` function and added related documentation for Cargo.
- Different modes of self-update were supported for Rustup to provide a better experience.
- Improved Rustup testing and was responsible for releasing Rustup.

Phlare

<https://github.com/grafana/phlare>

(Active Contributor) 28+ commits

- Refactored all command line flags and added flags descriptions and tests
- Added a management page to show the status of each component
- Refactored all APIs to make them easier to write and test

ant-design

<https://github.com/ant-design/ant-design>

(Previous Maintainer) 24+ commits

- Refactored Input component and added cleanup button
- Designed and added Skeleton component

⚙️ SKILLS

- **Programming Languages:** Experienced in Go/Rust/JavaScript, **multilingual** (can adapt to any language)
- **Development Tools:** familiar with Linux-based programming, have experience with team tools like Git, GitHub, Slack, and Jira, etc.

- **Languages:** **English** (Can read, write and speak fluently), **Chinese** (Native speaker)