

RUSTIN LIU

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👤 WORK EXPERIENCE

PingCAP Inc., Chengdu, China 08/2020 – Present

(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.
- Customization of plugins based on the needs of the TiDB community. Microservice pattern development using Golang, deployment and maintenance using Kubernetes.
- Fixed bugs and added features for Prow, submitted 39 PRs.

(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.

Morningstar, Inc., Shenzhen, China 06/2019 – 07/2020

(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.
- Write 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.

🐙 OPEN SOURCE PROJECT

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

(Active Contributor) 136+ commits

- Improved the error prompt for a number of Cargo commands to make errors more effective and clear.
- Added the `-crate-type` function and added related documentation.

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

(Maintainer) 85+ commits

- Improved the error prompt for a number of Rustup commands to make errors more effective and clear.
- Self-update different modes are supported for Rustup to provide a better experience.

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

(Maintainer) 24+ commits

- Refactoring the Input component (adding a clear content button, refactoring the entire Input component for reuse code)
- Add Skeleton components (most of the components were written by me, all of them have been refactored by me now)
- Write contribution guidelines to guide others to participate in community contributions.

⚙️ SKILLS

- **Programming Language:** Experienced in Go/Rust/JavaScript, **multilingual** (not limited to any specific language)
- **Distributed System/Database:** Experience in tuning and deployment of TiCDC.
- **Web Development:** Experience in developing web applications with React/Vue/Golang/Rust.
- **Developing Tool:** familiar with Linux-based programming, have experience with team tools like Git, GitHub and Jira, etc.

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

EDUCATION

Chongqing University of Technology, Undergraduate

09/2015 – 06/2019

- Major: Software Engineering, School of Computer. Graduation date: 06/2019