Mrinal Paliwal

http://mrinal.pw/now Github: github.com/mnpw

EXPERIENCE

• Bytebeam ☑ Remote

Systems Engineer II

Apr 2023 - Current

Email: mrinalpaliwal98@gmail.com

- Part of systems engineering team. Worked on data pipelines connecting IoT devices to Cloud.
- Scaled data pipeline handle up to 1.2M events/second to meet production scale
 - * Added support for cloud storage (S3/GCS/ABS) as data sink in data broker architecture.
 - * Optimized write performance to Clickhouse by implementing worker pools and pipelined data flow.
 - * Improved efficiency by **reducing data flow 5x** from 150MB/s to 30MB/s with Parquet format adoption.
- o Built data export service handling up to 10GB datasets using web-queue-worker model.

Systems Engineer I

Jul 2022 - Apr 2023

- Owned and managed development of in-house MQTT broker.
- ∘ Migrated legacy data processing engine written in Go (~10k LOC) to Rust for ease of maintaince.

• MakeMyTrip ♂ Gurgaon, India

Software Engineer - Holidays Customer Experience

Jul 2020 - Nov 2021

- Worked on 5+ services behind supportz.makemytrip.com. Stack Java, React, Groovy.
- o Integrated MakeMyTrip's support-agent system with Indigo Airlines' 6E-Holidays (media coverage ♂) platform.

OSS

- apache/arrow-rs □ #5852: Fixes a bug in merging logic of Arrow schema
- metrics-rs/metrics □ #460 Fixes memory leak in histogram data collection

EDUCATION

Indraprastha Institute of Information Technology ☐

Delhi, India

Electronics and Communication Engineering

May 2020

PROJECTS

- zzva 🗗 Rust
 - o Extensible version of 2048 game with support for cli game-play.
 - Includes client library and REST api endpoints for easy integration.
- webserver-rs ☐ Rust, Tokio
 - Research project to understand how web-servers work.
- hashmap-rs □ Rust
 - Implementation of linked HashMap with support for Rust's Entry api.

Programming Skills

- Languages Rust, Python, Javascript
- Technologies Clickhouse, Tokio, React, Docker, Postgres, Git

ACTIVITIES

Indraprastha Institute of Information Technology

Delhi, India

Teaching Assistant - CSE101: Introduction to Programming

Aug 2019 - Dec 2019

- o Designed course material for labs, tutorials and guizzes.
- \circ Taught and held doubt resolution sessions for a group of \sim 50 students.