

Rajdeep Kaur

rajdeep.kaur2009@gmail.com

WORK EXPERIENCE

Software Developer at Cloudflare

Feb 2020 - Present

- Designed and implemented a dead letter queue in Golang that filters out corrupted data. Scaled it for 1 billion requests per second. Managed its deployment across entire Cloudflare CDN servers.
- Implemented a wrapper in Golang that consumes batches of messages asynchronously from Kafka and forwards them to Clickhouse. Currently handling 1M requests/sec.
- Created cost and time estimation frameworks for Clickhouse db schema migration for columns that size upto 1 trillion bytes.
- Redesigned and refactored ABR(Adaptive Bit Rate) library in golang from a function-based approach to channel-based approach for better code maintainability
- Integrated konsumerator in all Kubernetes based kafka consumers, so they automatically scale CPU and Memory according to Cloudflare traffic.
- Currently Working on the data corruption problem that we have been receiving on Cloudflare CDN servers.

Software Developer at JPMorgan Chase

Jan 2020 - Jul 2019

- Worked on The asset forecasting calculator framework using python
- Worked on the testing framework for the existing forecasting asset calculator using selenium python to en-chance the system availability

Software Developer at Vernacular.ai

Nov 2017 - Dec 2018

- Built the internal cron runner framework using Django and Django-cron. Ported this framework to AWS Lambda when faced with scaling issues.
- Contributed to the core backend stack. Was responsible for building and maintaining several APIs and resolving scale issues.
- Worked on Elasticsearch which was used as the primary data store for logs generated across services. Was the maintainer and resolved all conflicts, and updates and ensured the overall health of the cluster.
- Built the monitoring framework for AI to generate alerts whenever the model performance degrades.

Google Summer of Code Intern, KDE

Apr 2016 – Aug 2016

- Worked on GCompris, An educational suite under KDE with Johnny Jazeix
- Implemented a game of family tree using Qt modeling.
- Used Qt framework in C++ along with JS, Cmake and Git as the VCS

Season of KDE

Oct 2015 – Mar 2016

- Worked on GCompris, An educational suite under KDE with Bruno Coudoin
- Implemented the Classical Hangman Game with localizations enables along with sound effects and image animations
- Used Qt framework in C++ along with JS, Cmake and Git as the VCS

TECHNICAL SKILLS

- **Language** – Golang, Python, C++, Javascript, LUA, Qt, Bash,
- **Distributed System and clouds** – Kubernetes, Docker, Kafka, Prometheus, Clickhouse, Elasticsearch, Grafana, AWS, S3, Salt, Vault, Consul

RELEVANT COURSES Data Structures and Algorithms, Artificial Intelligence, Database Management System, Operating System, Object Oriented Programming, Network Programming, Software Engineering,

SIDE PROJECTS

- **Podinfo** Working on converting all the REST API into GRPC in podinfo in web application made with Go that showcases best practices of running microservices in Kubernetes.
- **AutoLogout** A Chrome extension using JS that lets you logout from your social accounts.
- **Fbphising page** A website written in PHP, HTML and CSS that looks like a clone of your facebook login page but saves your password when you enter your login id and password in a text file.
- **Happy Birthday script** An automated script using Python, Facebook-Sdk and Graph API that parses your Facebook timeline likes and comments on your birthday posts.
- **NRetweets** An automated script written in Python using Tweepy (A Twitter API) that searches for a particular post by all your friends and retweets it.

EDUCATION

B.Tech in Computer Science and Engineering

Jul 2013 – May 2017

National Institute of Technology Durgapur, West Bengal, India

CONTACT DETAILS

- **Linkedin**
- **Spoj**
- **Github**