# Osman Ali Chowdhury

# **Software Engineer**

osman-chowdhury.me github.com/kimbbakar linkedin.com/in/kimbbakar chowdhuryosman04@gmail.com

Phone: +8801621452135

**Skills** 

Languages: Golang, C++, Python, Javascript, Ruby, SQL.

**Technology:** Gin, Django, Flask, ExpressJS, React, Redis, ElasticSearch, MySQL, MongoDB, RabbitMQ, Celery, SideKiq, gRPC, Git, Github Action, Docker.

**Experience** 

## ShopUp/ Software Development Engineer - II

September 2021 - Present

- Review and design engineering aspects of different product features.
- Successfully migrated a critical Rails service to a gRPC architecture, enhancing performance, scalability, and inter-service communication efficiency through the adoption of event-driven communication.
- Configured table partitioning using pg\_partman PostgreSQL, significantly improving query response times and scalability for large daily data sets.
- Implemented circuit breaker mechanism to minimize delays caused by failures in external service API calls for time-sensitive API requests.
- Optimized latency from ~2000ms to ~200ms and scaled up throughput to 60 RPS for notification services. Also, reduce costs to 1/3 of the original expense via dynamic SMS provider configuration setup.
- Prepared payment reconciliation dashboard to allow retailers to pay in multi-steps and keep those on track.

# **Evaly / Software Engineer**

July 2021 - September 2021

- Provided a better Search experience for all Evaly products.
- Lead the relevance-driven search project where search results will be based on the user's searching behavior.
- Increased the percentage of a user landing on a desirable product from the front page of searched results up to 11%.
- Introduced auto rollover group to keep the search index in shape.
- Set up the batch processing pipeline with Redis stream for the bulk operation to limit the app server's memory footprint & concurrent call over search DB.

# NewsCred(now known as Optimizely) / Software Engineer

October 2019 - June 2021

- Launched a file server backed by Flask & AWS S3 service with the ability to render/upload files based on geolocation and impose access restrictions with smart URLs.
- Implemented content synchronizer between microservices based on changes in one end using Celery worker.
- Keep up and running the content ingestion pipeline with Python and other AWS services where content comes from various source feeds.

## KickBack Apps / Software Engineer

January 2019 - September 2019

- Built & provisioned the backend of <u>PhoneLine</u> and its admin panel with Golang, Redis & RabbitMQ.
- Released an open-source Golang task processor Cogman powered by RabbitMQ, Redis & MongoDB.

# East West University / Competitive Programming Trainer

May 2018 - February 2019

• Worked with students to build a strong CS background and improve their problem-solving skills.

# **Problem Setter and Judge**

March 2016 - November 2018

- External problem creator at HackerRank. Prepared above 40 algorithmic & DS challenges which have been used for the different coding interviews and competitions.
- Problem setter and Judge in BACS High School Programming Contest 2018
  NSU Inter-University Girl's Programming Competition 2018.

#### **Education**

## North South University / Bsc in Computer Science & Engineering

Summer 2013 - Spring 2019. Total earned credit - 128 out of 136.

#### **Achievement**

# **Sports Programmer**

January 2013 - August 2018

- 1. **Onsite Contest:** Represented NSU in 20+ National level programming contests. 9th, 12th, 14th, and 16th was the best position among all the participated contests.
- 2. **Online Contest:** More than two thousand problems have been solved in different online judges like UVa, LightOj, Spoj, Codeforces, Codechef, HackerRank, and TopCoder.

# **Project**

**Yatt:** A lightweight command line note-taking tool.

• Tools: Golang

Github: https://github.com/Kimbbakar/yatt

**Cogman:** An asynchronous task processor in Golang.

• Tools: Golang, RabbitMQ, Redis, MongoDB

• **Github:** https://github.com/Kimbbakar/Cogman

**BottleCap:** Language Parser and Interpreter.

• Toos: Flex-Bison. C

• **Github:** https://github.com/Kimbbakar/BottleCap