# KUSH KUMAR SHARMA

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WORK EXPERIENCE +9 YEARS

# **Staff Software Engineer**

### Rippling

May 2023 – Present

- Leading payroll platform resposible for handling payments, taxation and documentation of companies worldwide.
- Built async execution engine on top of Temporal that process +\$500M agency payments per month and generates +5M documents per week. Built inhouse OCR platform used for document audits, bill management and other usecases across the company.
- Building a custom query language used by operations team to templatize and generate documents on the fly.
   Leading Go tooling and ecosystem to democratize its usage across company.
   # Go, AWS, Docker, Python, K8s, Postgres, MongoDB, Redis

### **Senior Software Engineer**

Amazon

Jan 2022 - May 2023

- Led three teams of 15+ engineers for making Pricing in Amazon as competitive as possible. This requires knowledge of all competing seller product prices, generating internal thresholds based on it, and making sure all the products getting sold on Amazon meet the bar.
- Improving customer experience to find the best available alternatives when the featured product is not available. A featured product on Amazon goes through various checks and sometimes all those checks result in no product on the Retail website, that's when alternatives are needed.
- Contributed to features that added +\$136MM YoY revenue and +200 bps in retail price competitiveness index. # Java, AWS, Docker, DynamoDB, and mostly Amazon internal tech

Lead Engineer Gojek Aug 2019 – Jan 2022

- Led a team of 3 engineers for an ETL tool Optimus, which is a performant workflow orchestrator for data transformations, data modeling, and data quality management. Horizontally scalable, highly available using raft & ships with its own distributed scheduler/executor. Supports existing schedulers like Airflow. Currently powers the data warehouse pipeline for 6+ companies.
- Built an Identity aware Access Proxy deployed in front of web-facing applications capable of authorizing requests. It supports http1.1/http2/http2c transports, request enrichment, and managing authorization policies of users. Deployed for 8+ services in the company. Support for OpenTelemetry and cloud native.
- Built a data lineage service that helps 500+ engineers discover data in the company. This requires the collection of metadata from several services, processing it, and generating lineage graphs that can be queried in near real-time.
- Built a data quality service that verifies duplicate data and ingestion latency between the petabyte-scale ocean and warehouse pipelines.

# Go, Java, Terraform, Kafka, Airflow, Kubernetes, BigQuery, Apache Beam, Parquet, GRPC, GCP

Founder Moonware (startup) Jan 2019 – Aug 2019

 Started a novel community that had more than 6k+ novels, 7M+ chapters indexed, and crawled 500+ sites for the latest updates that required processing & filtering before listing.
 # React, PHP, Laravel, RabbitMQ, NodeJs, WordPress, Nginx, Ansible, Docker, Redis, MariaDB

Software Engineer Sumo Digital Jan 2017 – Dec 2018

• Worked on a AAA game titled Team Sonic Racing for publisher Sega implementing gameplay, physics, and weapon mechanics.

# C, C++

## Software Engineer

#### GlaxoSmithKline

Aug 2015 - Dec 2016

Developed 2D platformer, a promotional game for the milk product Horlicks.
 # Android, Java, libGDX, Box2D, OpenGL, Lwigl

# **TECHNICAL EXPERIENCE**

**Projects** \*Source available on Github

Raystack Foundation\* (active): Founding member in Raystack, a modern data platform that empowers
organizations to discover, transform, analyze and secure data faster and efficiently.
 # Go, GCP, ElasticSearch, BigQuery, Airflow, Kafka, gRPC

- **Prime Party** (2020): It's a chrome extension for watching Amazon Prime Videos together in sync with friends. It synchronizes video playback and adds group chat. Had 25K+ active users before selling it to a company. # Nodejs, Socketio, Redis, Javascript, Nginx
- Servo\* (2020): Server management tool that can take backups of logs, files & databases to S3, clean logs older than X days and can serve as SMTP relay for sending mail via AWS SES.
   # Go, SMTP, AWS SES
- Linux Kernel Module\* (2016): Mouse driver that can control pointer from userspace to kernel space. It is inserted as a kernel module that can be controlled by writing to a specific dev/<charfile>.

  # C, Linux

# **EDUCATION**

# Mesra, India Birla Institute of Technology

2014 - 2017

- Master of Computer Application (MCA) in Computer Science, GPA: 8.7
- Coursework: Numerical and Statistical Methods, Discrete Mathematics, Data Structures and Algorithms,
   Operating System, Computer Organization and Architecture, Computer Graphics, Automata Theory, Compiler Design, Software Engineering, Artificial Intelligence, System Programming, Soft Computing

## Jaipur, India

#### **Jaipur National University**

2011 - 2014

- Bachelor in Computer Application (BCA), Gold Medalist, GPA: 8.2
- Coursework: Digital Electronics, C/C++ Programming, Programming Principles, Databases, Optimization Techniques, Computer Networks, Java, PHP, Electronic Resource Planning

#### **LANGUAGES AND TECHNOLOGIES**

- Programming Languages: Go, Java, C++, PHP, Python, JavaScript
- Databases: Postgres, MySql, Redis, BigQuery, MongoDB, ElasticSearch
- · Web: HTML5, CSS3, NodeJs, GCP, AWS
- Serve: Nginx, Docker, RabbitMQ, Kafka, Kubernetes, Terraform, Airflow, gRPC
- · Libraries & Frameworks: React, WordPress, Laravel, OpenGL, libGDX, Unity

## **ADDITIONAL AWARDS**

- **Second Prize, Hack-4-fun:** Competition conducted by GlaxoSmithKline & HackerEarth for developing an android game, out of 8000 people all over India, which landed me a 1-year contract with the company.
- Seventh Prize, IndiaHacks: Hackathon by HackerEarth for developing a game, out of 11000 people all over the world.
- Gold Medal, Bachelor in Computer Application: Graduation from Jaipur National University.

#### LINKS

- LinkedIn: https://linkedin.com/in/thekushsharma
- GitHub: https://github.com/kushsharma
- Optimus: https://github.com/raystack/optimus
- Frontier: https://github.com/raystack/frontier
- Raystack Foundation: https://github.com/raystack
- Team Sonic Racing: https://www.youtube.com/watch?v=765jJE7HjUA