

# MRINAL KANTI ROY

## Software Developer

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## EXPERIENCE

Java Python Kafka Big Query Microservices  
Distributed Computing Rest API GRPC Event Driven  
SQL Server Data Warehouse

### Senior Software Engineer

#### Wayfair

📅 Jun 2021 – Present

- Developed the Shipment microservice, build on Java Webflux using SQL Server as data store, which include APIs to post new shipment and their updates, Kafka queues to stream the updates and API to lookup the current state of the shipment.
- Designed and developed the service for generating tracking barcode(SSCC), using GRPC on Java, for incoming packages in the manifest.
- Developed the package tracking service using Java Spring Kafka, that consumes package handling events from multiple teams, store and stream the same to shipper teams as well expose the package history via REST endpoints for Visibility and customer service teams.

### Senior Software Developer

#### Randstad Technologies, CVS Health

📅 Jan 2018 – May 2021

- Streamlined the care of program change process based on changes in client contracts eliminating about 60 hours of manual work of data updates and report generation.
- Implemented solution to centralize mailing of letters to patients, improving the tracking of critical mailers and allowing reuse of extracts from OLTP, eliminating the manual work involved in individual campaigns.
- Developed ETL solutions for migration from in house patient care system to specialized vendor (EPIC) enabling a industry standard interface for the nurses.

### Senior Associate

#### Cognizant Technology Solutions, Ally Financials

📅 Feb 2016 – Dec 2017

- Developed and maintained data pipelines to ingest data from different line of business to monitor for potential money laundering activity.
- Augmented the customer risk scoring model to handle risk profile changes based on real time data from analyst module, reducing number of false alerts by 60%.

### Information Technology Analyst

#### Tata Consultancy Services, Rite Aid

📅 Oct 2009 – Feb 2016

- Migrated the data warehouse from DB2 to 1010 Data. Created the required data flows in SSIS and converted the SQL queries and procedures to 1010 macros for reporting.
- Created central systems for all the feeds out of data warehouse, which reduced the number of SLA breach by 70%

## PROJECTS

### Distributed Key Value Store

- Implementation of distributed key value database, supporting transactions, using log replication and paxos as consensus algorithm

Java Paxos  
Log Replication  
Distributed Computing

### Map Reduce

- Implementation of map reduce on a distributed system using GRPC

C++ distributed  
map reduce GRPC

### Pedestrian tracking

- Tracking pedestrian in a video using template matching and particle filter.

Python numpy  
Computer Vision  
Particle filter Open CV

## EDUCATION

### MS Computer Science

#### Georgia Institute of Technology

📅 2019 – 2021

### B.Tech Information Technology

#### National Institute of Technology, Durgapur

📅 2005 – 2009