



DIPANJAN GOSWAMI

SOFTWARE ENGINEER III

Results-Driven Software Engineer | Proficient in Java, Python, SQL, PL/SQL and Terraform | Specialised with System Design, Development, and Maintenance of Cloud-Native Applications for Seamless Transaction Processing

Details

Phone

+91 - 9051483631 / 7059935493

Email

dipanjan.1910@gmail.com

Address

! / 6 NAYAPALLY, BELGHORIA
KOLKATA, INDIA
700056

Nationality

INDIAN

Date / Place of Birth

19-Oct-1995

KOLKATA

Skills

Core Java (v8/v11/v17)



Spring Boot Web/Webflux



RxJava+Reactor



Oracle SQL/PLSQL



RDBMS - MySQL/Postgres



Terraform



Python(v3.8-3.11)



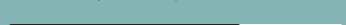
NoSQL- Cassandra/DynamoDB



Apache Flink



NodeJs(v14-18)



Hibernate & JPA



Docker



Kubernetes (EKS/ECS)



Apache Kafka/AWS MSK



Experience

Software Engineer III at JPMorgan Chase & Co, Mumbai

MARCH 2024- PRESENT

CPOD or Commerce Platform Operation Data is a centralised datastore for Merchant Services under Payments Technology which involves different data technologies around it like Kafka, Apache flink, Snowflakes and Kinesis Streams or KStreams. As a senior member of development Team, I design, develop and implement functionalities to migrate data from different lifecycle datastore to central datastore. My role in this project is not only to be a senior application developer but also working of devOps pipeline, git branching strategy management, manage change request and Incident management for production deployment and maintain communication with stack holders to meet delivery timeline. My major contribution to this project are as follows -

CPOD Simulator - Build a CPOD Simulator. I accessed the risk of having multiple data sources during testing. So to avoid dependency on other lifecycle I created one simulator application in AWS ECS cluster with performance and QA team so that independently they can do the testing for any events. It is currently helping performance engineers and QA Team can utilise this to send Millions of messages at 2-3K TPS.

Migration to CPOD - Migration to CPOD is a continued effort of data consumption, transformation and load to Aurora clusters using Apache Flink and later load the data to Snowflakes after expiry of Quick access time frame of 45 days. Currently we have completed for tandem lifecycle in which I have made significant contribution by resolving production issues with Kubernetes, Network Security and other AWS Infrastructure etc. Currently I am working for Unified Payment Gateway(UPG) Data migration using same technologies. This development process Includes data design, data mapping and finally implementing inside into a flink Job.

Software Engineer II at JPMorgan Chase & Co, Mumbai

SEPTEMBER 2021 - FEBRUARY 2024

As a software engineer my primary responsibility is to understand business use cases and have design discussion with product owners and design authorities, develop and test core functionalities of payments chargeback lifecycle like Accept, Represent, Pre-Arbitration, Arbitration etc. Chargeback system integrated with payment brands like VISA/MasterCard to process chargebacks and reconcile against payments data. In disputes development life cycle we follow design discussions and then Development of features, API management, Infrastructure provisioning and data design. My major roles and responsibilities described below -

Development - Developed multiple Lambda and Kubernetes application inside AWS in NodeJs, Java, RxJava using Spring Webflux for Disputes v1.0 and v2.0 and for API Projects for enabling Consumer clients. I worked on python based flask applications for building PAN Redaction solution with PyTorch. Specially with containerised applications I tried multiple build options like multi stage build etc. Besides feature development worked with CI/CD pipeline enhancement and Jet Identity based authentication. I have supported multiple Change requests and Incidents during production deployment.

Maintenance - Maintained Kubernetes stack Infrastructure by using correct ASG or Karpenter Nodes configuration, Network Configuration and on time upgrades in AWS and GKP. I used keep checking performance of the containers deployed in it via performance test in certain interval to ensure optimal performance of the system.

Infrastructure Provisioning - Well Versed with Terraform scripts and provisioned multiple resources in AWS environment and Designed AWS infrastructure Blueprint to reduce risk due to change in architecture which sub divides Infrastructure components and provide better security to customer data.

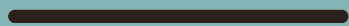
Observability - Enabled monitoring and observability with Splunk Dashboard or Cloudwatch Alarms/Dahsboard for achieving alert mechanism.

Network Security Management - Worked with APIGEE and AWS WAF and well versed with certificate management and network security like TLS, SSL, mTLS, JWT Token, basic Auth, API KEY based authentication etc

Cloud Infrastructure



Cloud functions - lambda



Cloud streaming/messaging



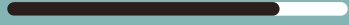
Cloud networking/security



Cloud architecture design



Git - (Github/bitbucket)



CI/CD - Jules/Spinnaker



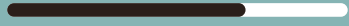
Testing - Unit/Behaviour



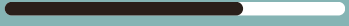
Performance Testing



Splunk



Datadog



Hobbies

- Art - Painting , Stage Decoration
- Sports - Football and Cricket

References

Prof. Krishanu Datta
Heritage Institute of Technology
+91-9830039964
krishanu.datta@heritageit.edu

Achievements

Final Participants
Kshitij, IIT Kharapur
JAN,2015

Links

- [Linkedin](#)
- [Github](#)
- [Oracle Autonomous Database Cloud 2019 Certified Specialist](#)
- [Oracle Cloud Infrastructure 2019 Certified Architect Associate](#)
- [AWS Certified Solutions Architect](#)

RDBMS maintenance - Well versed with RDBMS Query Optimization . I keep checking query performance in lower environments during perf tests and decide on Indexes. Actively worked on backup and recovery steps and data purging Design.

Presentation - Visibility in Tech Forum like JPCM internal APR Showcase, OKR and Grandstand with topics like RDBMS in cloud, Kubernetes and Cloud Infrastructure.

Staff Consultant at Oracle, Mumbai

NOVEMBER 2019 - AUGUST 2021

OBCFPM - Currently working on this project as a developer to develop this middleware product which is based on OBMA architecture based on java spring boot. This relates FC Core System with other banking products and considered as extension of FC-Core and FCUBS product.

Yes Bank DataMart - Backend Report Generation Process from ReadOnly server. Major Complexities are query performance and data handling due to bulk data sets. The entire process took efforts like migration, validation and automation for data coming from different sources of bank server and Run analytics over the data.

Oracle EMS System - This was start to end product development over Oracle Flexcube 11.x. I am solely responsible for development of Software based Routing Engine for incoming and outgoing swift messages from Bank/Swift Servers which has been integrated in Oracle EMS System and also, I worked in the development of job processing and parallel execution of jobs, performance efficient system building, and dynamic file upload process for greater user experience

System Engineer at Tata Consultancy Services, Mumbai

AUGUST 2017 - OCTOBER 2019

Master Module - Progressive new development and support in back-office processing based on Oracle PLSQL This module contains all the major tables and other database objects of the application related to Client Registration, Security processing, Funds Processing, Administration Control, Login module and also support in exchange regulatory feature development.

Web Module - Development and Support of Java Web Application which is related to customer care service and mostly related to report generation.It involves Rest Web services for accepting requests from third party for Client registration request, KYC (Email and Mobile) validations etc

DB Backups - Database and Server maintenance in Development Environment and in Client environment. Weekly Backup and Recovery in Development environment is mandatory

Education

Heritage Institute Of Technology, Kolkata B.Tech (ECE)

AUGUST 2013 - JULY 2017

RKVM Vidyabhawan, Kolkata Higher Secondary (XII)

MAY 2011 - MAY 2013

RKVM Vidyabhawan, Barrackpur Secondary School (X)

APRIL 2005 - MAY 2011

Academic Project

Vedic Calculator Design, Kolkata

SEPTEMBER 2016 - MAY 2017

Designing a basic calculator with the help of sutras and corollaries of Vedic mathematics. Important feature of this project is generalization of algorithms, reduction power consumption with the use of VHDL coding and FPGA.

Internships

Simoco Telecommunications, Kolkata

JUNE 2016 - JULY 2016

Hardware design in PCB board to build a solar charge controller

All India Radio - Akashvani Bhawan, Kolkata

DECEMBER 2015 - JANUARY 2016

Industrial Visit on purpose of study Satellite Communication.