**Prakash Kumar**
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## Summary:

- A software developer with **8 years** of experience in product development and product enhancement.
- Possess sound **High level design, Low level design, Distributed System and problem solving skills**.
- Received **Star Performer for Quarter III, 2022** for immense contribution to the Project.
- Received **Golden batch** for problem solving on https://www.hackerrank.com/prakashkumar5401

## Technical Skills:

- **Distributed System**: Highly Scalable, Available, Resilient, low latency, low memory footprint software design and delivery.
- **Service level stacks**: Java-11, Spring boot, Vert.x, Microservices
- **Database**: NoSQL (Couchbase DB, MongoDB, Cassandra), SQL (Oracle, MySQL)
- **Distributed cache**: Redis
- **Streaming Platform**: Kafka
- **Cloud**: Azure, AWS, Terraform (infrastructure as code software)
- **Containerization**: Docker, Kubernetes (Helm package manager)
- **Build tools**: CI/CD, Devops, Jenkins, Gradle, Maven, Git, SVN.
- **Test tools**: Junit, Mockito, Integration testing, E2E test, Performance testing, Load testing, Stress testing.
- **Monitoring tools**: Splunk, AppDynamics, Grafana.
- Event driven, domain driven architecture, eventually consistency, SOLID Principles, Design patterns, 12 factors.
- Agile, Scrum, Continuous delivery.
- Linux environment with bash scripting.

## Professional Experience:

**Tech Lead, BigBasket, Bangalore**
May 2022 to present
Platform development:
- BB-daily - A subscription based platform which enables customers to subscribe to milk or non-milk products delivery every day.
- Last Mile Delivery - A platform which facilitates delivery of products from warehouse to customer door.
- CRM service - A customer facing service responsible for providing all customer information including members, orders etc.

Responsibilities:
- End to end ownership of microservice right from HLD & LLD design, implementation, testing, performance improvement.
- Delivery of scale ~ **20 Lakhs orders per day.**

Tech Skill used:
- Java-11, Springboot, Vert.x, microservices, databases - SQL, NoSQL, Kafka, devops, Jenkins, Kubernetes, helm chart, docker, AWS cloud.

**Software Development Engineer 2, Tesco Plc, Bengaluru, India**
July 2019 to May 2022
Platform development: Fulfilment Point System -  A platform facilitates smooth online operation at more than 400 stores in the UK to fulfill 1 million online orders per day.

Responsibilities:
- End to end ownership of three microservices right from HLD & LLD design, implementation, testing, performance improvement.
- *Delivery of scale ~**500K million orders per day**, 1k QPS in peak time, read latency < 150ms, p99 < 150ms.*

Key Accomplishments:
- **DB concurrency problem** : Design and implement solution to DB concurrency problem without any locking mechanism. The problem was created due to a single DB document being updated by multiple parallel Kafka events. The design handles out of sequence events problems and lost update problems. The design completely avoided the concurrent modification problem without any locking mechanism which is time expensive.
- **Store-demon**: A microservice responsible to monitor day to day stores operations, auto-heal any gaps found before any escalation, notify if any manual intervention required, collect daily statics with any abnormality.
- **DLQ Processor** : A microservice responsible for persisting and replying failed Kafka events when manual intervention is required. The microservice consumes failed messages from DLQ, persists and reprocesses to desired Kafka topic.
- **Buffer logic** : Design and implement buffer logic which is maintained per store per printing area based on the number of pickers available at the store. A picker is store staff who is responsible to pick physical products from the store and put in the required tray trolly to dispatch.
- **Prod-projection service**: A microservice responsible to cache updated product attributes like product details, location of product at the store, price of product, alternate products etc. The microservice facilitates other microservices with product attributes readily available during store operation.
- **Circuit breaker** : Design and implement circuit breaker artifact responsible to break the circuit when a configured number of Kafka events fail per Kafka binder. The microservice stops consuming any more events from the broken binder. The binder tests the connectivity after configured exponential incremental time interval and resumes event consumption post when tested positive.

**Senior Software Engineer, [Netcracker Technology](), Bengaluru, India**
Feb 2016 to July 2019

Platform development: Real Time Framework -  A light weight platform to validate incoming requests, data retrieval.

Responsibilities:
- End to end ownership of RTF components for client  T-Mobile, USA.
- Writing optimised business logics as per client requirement in Java and in JBOSS Drools supported language.
- Low Level design, API creating, performance improvement, mentoring junior developers.

Platform development: Telecom Operation and Management System:
Business Support Systems (BSS) facilitates clients to manage telecom business with partners, vendors, clients.
Operations Support Systems (OSS) facilitates client to manage telecom operations including order management,  order processing.

Responsibilities:
- Design and create new features to TOMS products like commission management.
- Low level design, feature development and performance improvement.

**Software Engineer, Nokia Networks, Pune, India**
Sept 2013 to Feb 2016
- Created Vodafone Music applications provide customer-facing applications and web experiences that expose the catalogue of media assets and provide avenues for fans to connect directly with the artists.
- Low level design, development and testing.

**Education:**

Masters in Economics from Indira Gandhi National Open University, India

Bachelor of Technology (B. Tech) from Biju Patnaik University of Technology, State University, Odisha, India.

**Hobbies:**

Tracking Socio-economics changes across the globe and its impact.