#### **PROFILE SUMMARY:**

- Overall, 9 years of experience with 5 years of experience in the field of Big Data technologies like
   Hadoop, Spark, Kafka
- Experience in the field of software development in Java, J2EE, Spring Core, MVC, RESTful webservices and Hibernate right from beginning of the career.
- Hands on Experience on Azure cloud services like Azure AKS, Application Insights, Application configuration, even hubs, blob
- Hands on experience in developing ETL jobs using Hive.
- Knowledge of Kubernetes and Docker
- Involved in all the phases of the software development life cycle such as requirement analysis, design, development, testing, implementation documentation and Deployment. Experience in agile and Kanban methodology.
- Good knowledge on java design patterns.
- Having On-site experience in supporting production deployment and issues support for DMP system which serves China market.
- Have knowledge about Continuous Integration and Continuous Delivery (CI/CD) using Jenkins
- Experience in collaborating with different overseas teams (USA and China) to meet delivery deadlines

### **PROFFESIONAL EXPERIENCE**

Working as Senior Technical Lead at HCL Technologies LTD, Bengaluru, since June 2019.

Worked as Senior Software Engineer at Huawei Technologies India Pvt Ltd, Bengaluru, since Dec 2011.

#### **TECHNICAL HIGHLIGHTS**

- Programming Languages: Java, Scala
- **Big Data Technologies**: Spark core, sql, streaming, Hadoop (HDFS, YARN), Kafka, Kafka streams, Hive, Zookeeper.
- Cloud: Azure
- Container: Docker and Kubernetes
- Relational Databases: Oracle, MySQL
- NOSQL Database: Redis.
- **J2EE Frameworks:** Spring Core/MVC, Basics of Hibernate
- Web Technologies: Servlets, XML, JSON
- IDE: Eclipse, IntelliJ IDEA
   Version Control: SVN, GIT
- Software Concepts: Design patterns
- Web / Application Server: Apache Tomcat 8
- Build Tools: Apache Maven, Gradle
- Business Rule Management system: Drools
- Code Quality tools: Find bug, PMD, Source monitor, CodePro Analytics, HP Fortify, Coverity

• Microsoft certified: Azure Fundamentals on July 24, 2020

### **WORK EXPERIENCE:**

1. Project Name: Support Assist Intelligent Engine Data Analytics (SAIE DA)

Client: DELL EMC, Bangalore, India June 2019 to till date

Team Size: 20

**Role:** Java and Spark Developer

**Project Description:** Support Assist is the Smart technology that proactively checks the health of system hardware and software. When an issue is detected the necessary system state information is sent to Dell servers. Have worked on this project in both on premises deployment and cloud migration.

### Developing and deploying on-premises

Data received from Enterprise devices, storage network, client devices is pushed to NAS as zip files and corresponding meta information is stored in oracle. End goal is to perform ETL on data (XML and JSON) and export to Azure BLOB as parquet file. Below pipeline is implemented to achieve the goal.

- a. Saagent ingestion meta: component to read meta data from oracle and loads data in batches to Kafka in Json format.
- b. Saagent file parser: Component reads json metadata from Kafka in batches, reads corresponding zip file from NAS, read, and flatten the XML files using xml and json parsers and store data to hive in tabular format.
- c. Saagent extract file parquet: Component reads required data from Hive tables prepares parquet files, zip it and export to Azure BLOB. So that client team can use data for further processing

# Responsibilities:

- 1. Involved in requirement discussions and preparation of Data mapping document.
- 2. Role was to develop code for the components Saagent ingestion meta, Saagent file parser.
- 3. Performing unit and integration testing for the developed components in SIT and DIT environments.
- 4. Involved in performance testing and submitting performance reports.
- 5. Identifying data quality issues, handling it so that application should not fail and reporting to data provider team
- 6. Supporting both UAT and PROD deployments and monitoring health of the application.

**Tools and Technologies:** Spark Core, Spark SQL, Kafka, Hive, Java, SQL, JSON, Maven, Jenkins, HDP, Ambari

# Developing and deploying to Azure cloud

The main objective of this module was to process all the collection which comes to azure cloud via webservices. Transformation done was extraction of files from azure blob store,

transform xml to json, compress to google protobuffs and send it to EventHub. It has been Deployed on Azure Kubernetes services.

## Responsibilities

- a. Design and develop Kafka Stream Application to process high volume of data in real time.
- b. Implementing blocking queue data structure with multi-threading to achieve high performance
- c. Supporting UAT and production deployments. Monitoring health of application by writing KQL queries on data stored in azure application insights.

# **Tools and Technologies:**

Azure event hubs, Application insights, Application configuration, AKS, Java, Kafka stream, google protobuff, blob store, docker, Kubernetes

2. Project Name: Data Management Platform (DMP) Huawei, Bangalore, India Nov 2016 to June 2019

Team Size: 13

Senior Software developer/MDE (Module Development Engineer)

**Project Description:** DMP system unifies all the users' activity data across multiple services of Huawei such as Hispace (AppStore), Vmall (e commerce), and ADN in real time. It also stores and manages users' personal and device information to understand the user better.

The stored data is evaluated against predefined audience conditions defined by partners in both real and non-real time, the evaluation result of the user is then shared marketing and advertisement teams (partners) so that partner can target user for personalized recommendations and advertisement purpose.

### **Responsibilities:**

- 1. Majorly involved in developing Real time Spark streaming and iterative spark application using Java as programming language.
  - 2. Implemented spark accumulators and broadcast variables for real time streaming applications.
  - 3. Developed applications that produce messages to and consume messages from Kafka.
  - 4. E2E understanding of DMP and giving E2E flow demo to clients.
  - 5. Developed REST APIs to support CRUD operations for Console component of the DMP.
  - 6. Travelled china for deployment and issues support.

**Tools and Technologies:** Spark Core, Streaming, Kafka, Java, Redis, Hive, Spring Core/MVC, Hibernate, MySQL, Gradle

### 3. Project Name: Recommendation server (RAS)

Huawei, Bangalore, India Dec 2015 to Nov 2016

Senior Software developer

**Project Description:** Recommendation platform pushes apps/video/news etc recommendation to end users mobile. RAS which was developed from the scratch is one of the sub component of Recommendation platform which exposes REST API to accepts the request, based on the request it decides whether to recommend apps/video/news etc and queries preloaded recommendations for the user from REDIS database and send it back to the requester.

Recommendations query, audience conditions checking, and algorithms execution happens by executing DROOLS files which are generated and pushed to Maven repository (Sona type Nexus) by other component called Scenario Manager (SCM). RAS read the DROOLS files from repository and caches in to memory once there is request for recommendation corresponding DROOL file will be identified and all rules in the file will be executed one by one to ultimately return the recommendations which are really intended for the user.

## Responsibilities:

- 1. Developed REST interface which accepts POST request and returns preloaded recommendations by querying REDIS in-memory database in JSON format after processing.
- 2. Implemented rule executor that executes rules inside .drl file one by one using KIE and DROOL libraries.
- Developed java client framework that gets connection with in-memory Redis database and interacts
  with same by executing Redis commands like get using jedis library and Huawei's customized DCSDK
  library.

Tools and Technologies: Core Java, Spring Core/MVC, Redis, Drools, Sonatye Nexus, KIE, Gradle

## 4. Project Name: Unified Service Development Platform (USDP)

Huawei, Bangalore, India Sep 2012 to Dec 2015

Software developer

**Project Description:** USDP is the management node for CRBT (Caller Ring Back Tone) and MRBT (Multimedia Ring Back tone) service. USDP provides the web services to manipulate management node data. USDP provides services like Provisioning, Resource Management and Charging for the subscribers of the CRBT system. It also provides communication with the other RBT systems like web for updating the information regarding user subscription and Charging. Using USDP system, operator can generate charging CDRs and can view the statistics on all subscription and resource management related operations. This product communicates with MSC and HLR. Provides the flexibility to all the features, so that the customer can customize the product features in the way they require. USDP supports features such as caller RBT, called RBT etc.

#### Responsibilities:

- 1. Analysing the given requirement, preparing simple design document, coding, unit testing and code review.
- 2. Developed SOAP client interfaces that communicate with HLR/external system for provisioning the service.
- 3. Fixing the production issues and releasing patches after testing along with release documents and providing urgent patches with requirement implementation.
- 4. Testing upgrade/rollback of patches and supporting upgrade/rollback on round robin fashion.
- 5. Developed tools the helps team and site engineers who sits at customer place like migrating full user data from base64/DES to AES256, decrypting data encrypted with base64/DES/AES.

Tools and Technologies: Core Java, J2EE, Web services, Soap UI, PLSQL

### 5. Project Name: IMOST Promotion platform

Huawei, Bangalore, India Dec 2011 to Aug 2012

Software developer

**Project Description:** Old promotion platform was able to support promotion of RBT (Ring Back Tones) the drawback was it was fixed to promote RBT's.

Suggestion from HQ was to develop promotion platform which should support other products like Games, Music etc along with RBT. Now this new promotion platform designed from scratch to support any number of products for promoting. This platform promotes the respective product to the end users the product may be RBT, Music, Games etc by sending marketing message through SMS gateway to user, based on user's reply platform invokes respective products interfaces provided by respective product platforms likes USDP, Games etc to perform the respective operation like subscribe, download, unsubscribe.

# Responsibilities:

- 1. Analysing the given requirement, preparing simple design document, coding, unit testing and code review.
- 2. Developing REST controllers to expose CRUD interfaces using MyBatis as DAO layer
- 3. Writing spring scheduled tasks to process CDRs.
- 4. Fixing static issues like Check Style, PMD, find bug, Fortify and Coverity
- 5. Implementing business requirements and fixing bugs

Tools and Technologies: Core Java, Spring Core/MVC, JSON+REST, MyBatis, Oracle 10g, Maven

### **AWARDS AND RECOGNITION:**

- Awarded "Excellent Technical Contributor" for contribution to DMP in 2018.
- Part of Huawei annual team award "Best successful hatch project" for contributions to DMP project in 2018.
- Awarded "Best Contributions-Development" for contributing big data components of DMP in 2017.
- Awarded "Extra Mile" spot award for learning big data technologies and contributing to project in short time
- Awarded "Best Initiator" spot award for introducing Google's "CodePro AnalytiX" eclipse plug-in which helps in maintaining code quality and readability by reporting 100s of issues to whole department.
- Awarded the "Best Development Contribution" Award for quality release in very short period of time
- Awarded the "The Best New Comer" Award for high contributions in early days of project development.

#### **ADDITIONAL INFORMATION:**

# **EDUCATION:**

- Bachelor of Engineering in Computer Science and Engineering, University of VTU Bangalore, Karnataka, India, 2011.
- Pre-University Course in PCMB from Department of Pre-University Education Bangalore, Karnataka 2007

### **PERSONAL DETAILS:**

Nationality : Indian
Marital Status : Married

Language Proficiency: English, Kannada, Hindi, Telugu

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Chandra S C