# Sameer Shukla

LEAD SOFTWARE ENGINEER

## Details

480-754-9793
sameer.shukla@gmail.com

## Skills

- SQL
- Git
- Docker
- Python
- Java
- GCP
- SpringBoot
- JPA
- ActiveMQ
- IBM MQ
- Apache Kafka
- JUnit
- Mockito
- Play Framework
- NumPy
- Pandas
- Matplotlib
- Bokeh
- Amazon AWS

## Profile

Technology enthusiast having 14 years of experience in Software design & development. Strong knowledge of Functional Programming (Java, Scala), Object-Oriented Programming & Data Structures. Experience in all phases of Software Development life-cycle including Analysis, Design, Development, and Testing. Strong Work Experience in Cloud-Native Micro-services architecture.

## Employment History

### Lead Software Engineer, McKesson Corporation, Irving, Texas

MARCH 2022 — PRESENT

- Working on McKesson's largest e-commerce platform team, the B2B Digital Solutions provides services to Pharmacies, Healthcare systems, and clinics serving U.S consumer medication needs via McKesson's e-commerce platform. Working on modernizing the technology stack for the largest medication provider in the United States.
- Leading the Team responsible for moving the legacy project's architecture and applications to new Micro-services architecture involving cutting-edge technologies like SpringBoot, JPA, Java 11, Google Cloud Platform, and ReactJS.

### Principal Software Engineer, OneTrust, LLC, Irving, Texas

JULY 2021 — MARCH 2022

- Organizations can leverage the OneTrust Data Governance solution to centralize and automate their data governance programs. From initial data discovery to business insights, OneTrust helps you know your data, build data governance policies that apply, and more effectively use your data to provide business value and maintain compliance. Data Governance
- Microservice Development: Involved in Microservices development, there are various services involved in Microservices Pipeline called Metadata-Catalog, Governance-Search. These services are written using SpringBoot, Java 11, Kafka, JPA, Azure, and Azure Cognitive Search. Services are designed on Saga Choreography Pattern.

### System Architect, Clinicalresearch.io, Irving, Texas

FEBRUARY 2021 — JULY 2021

- ICON Data Migration, Migration of entire data from clinical conductor to CRIO.
- It is a kind of data engineering project, where we are receiving multiple excel files from Conductor and after Data Cleaning and transformation, data is uploaded to CRIO systems in CRIO Format.
- Designed, Data Pipeline; I designed the data pipeline, retrieving the files automatically from google storage and generating the CSV from a big, large excel file which is an input to Importer.
- After transforming the data in CRIO format, uploading the multiple CSV to another google storage location for the Importer to consume.
- The Pipeline is developed using Apache Airflow. Development of Data Transformation; The Pipeline is established using Apache Airflow, the Airflow scheduler polls the storage file location and invokes the excel-import utility, this utility converts the excel file sheets to multiple CSVs.
- These CSVs are the input to the transformation program, the transformation program is written in Python, Pandas, and NumPy, and the entire business logic is written in Pandas and Python, in turn generating the output csv's for the importer to consume.

### Sr, Technical Architect, HCL America, Fort Worth, Texas

MAY 2017 — FEBRUARY 2021

- Migration of monolithic mainframe code to Microservices using event-driven architecture.
- It's a complete modernization of the legacy systems written in Mainframe.
- Currently, BNSF is maintaining all applications in Mainframes which they want to modernize.
- The inventory control and train tracking Project are built in recent technologies as a part of a modernization effort to allow users (Yard Masters, Station Masters, Mechanical, Customer Support) to access the system using any computer or mobile device.
- Train Tracker system will provide the functionality to track the train and all its status using Train ID.
- Train Tracker system also provides the functionality to search trains based on Station/State, Division, Subdivision, and Region.
- The inventory Control system and Train Tracker are developed on almost the same architecture. Designed & Developed the entire Train Tracker Search; designed and Developed the entire train search mechanism, there are overall 120+ train search criteria.
- Current Searches are supported by DB2 and Historical searches are supported from Cassandra using Apache Solr.
- Developed using Spring Boot, JPA 2.0, SpringDataSolr, SpringDataJPA, SpringDataCassandra, Java 8.0, Junit, Mockito.
- Design & Developed Application using Microservices architecture; Development of the Microservices using SpringBoot, and JPA 2.0 and used event-driven technologies like camel, and IBM MQ for mainframe message routing and publishing messages to Kafka topic for further processing by other microservices. Used CI/CD Pipelines using Jenkins & deployed in OpenShift.
- Developed Train Tracker Visualization System; Developed Train Tracker Visualization System using Python 3, Pandas, NumPy, Matplotlib.
- Developed UI using Angular 4 & Bootstrap 3; I volunteered and developed the frontend as well alone using Angular 4 with Typescript and Bootstrap3.
- Designed & Developed Prototypes; I was involved in creating prototypes, solutions/algorithms for solving complex business problems ex: Created prototypes on Kafka, Cassandra before implementation created prototype on Visualization System and UI.

### Jr. Java Architect & Sr. Software Engineer, IntraEdge Technologies, Pune, India & Phoenix, Arizona

MAY 2011 — JULY 2016

- In 2011 IntraEdge started operations in Pune, India, I was the first engineer Joined IntraEdge at offshore and started working for the Apollo Education Group project.
- I developed almost 80% of the system alone for Apollo's Analytics System known as Omniture Integration.
- Omniture Integration; It's an analytics project developed and designed at Apollo Group, Analytics includes how many students registered in the class how many dropped off and how many of them using courses developed at Apollo etc.
- Established OOZIE coordinators and written workflows to pull data from csv's file which contains Omniture tracking data for e-campus and other classroom portals.
- Written Hive Action inside oozie workflow, written Hive calls which populate parsed data from the csv file to the Hive Table and Written Mapper and Reducer which basically map's data from hive tables

and reducer PUT's data to the HBase table.

- Written the REST service using spring which interacts with HBase tables for Visualization.
- Developed front end using High Chart JS, jQuery and AngularJS for Visualizations.
- Technologies used: Java, OOZIE, Hive, Hbase, Hadoop, MapReduce, AngularJS & High Charts. Ship My Auto; Matson provides services for shipping personally owned vehicles between Mainland and Hawaii or Guam/Micronesia.
- It's a 4-step process where users can get a rate, prepare their car, deliver it to Matson and pick up at the destination plus users can track their vehicle as well.
- This project is developed using Java 8, SpringBoot, SpringDataJPA, Hibernate, MySQL, AngularJs, Bootstrap3, HTML 5, CSS 3 Tomcat.
- AES; Involved in all round development of backend systems including web service implementation in spring, development of JPA 2.0 entities, design and implementation of Workflows with Intel SOA Expressway, design and development of Generic DAO framework which reduced DAO implementation code.
- Security implementation in the system using digital certificates and keys to limit access to web services using a central key server with periodic key rotation strategy.
- Implementation of Central Authentication Service (CAS) for authentication of various related systems. Designed Workflows using BPEL (SOA-Expressway). Technology used: Java, SOAP/REST, SpringWS, Spring 3.0, JPA 2.0, ActiveMQ, Camel, Oracle, IntelSOAExpressway, Bamboo.
- Community; Private Social network for the neighborhood where a user can book and provide services with various other features.
- The technology used; Scala 2.11, Play Framework, Slick, Swagger, Bootstrap 3, Typescript, AngularJS, MySQL, Junit, GitHub, AWS-EC2.

### Software Engineer, Impetus Infotech, Indore, India

JANUARY 2006 — JANUARY 2008

- Joined In 2006 and started working with Research & Development unit known as IPServices group.
- We worked for Neustar Inc and the clients of its Verizon and Sprint.
- SIPXIGUI; SIPIXGUI implemented using J2EE/JSP with Tomcat 5.5.
- The MVC Web framework that is used is the combination of spring and Strut's framework.
- Struts based tiles and tags would be used while the Springs Dispatcher Servlet would be used as the Controller in the MVC paradigm.
- Where required AJAX used to render individual components like menu and body content for smooth page transitions without having to refresh the page.
- In SIPIX we have used various Smart Client components like Grid, List, Buttons and Tabs for sending data from the page to the Spring Controller protocols so that Telco's who work on ESPP can download data from our System, Implemented OOPS in JavaScript, Implemented Smart Client, JavaScript library Roles.
- Technology used: Java 5, Spring 2.5, Hibernate, Ajax, Smart Client, JavaScript, Linux, Oracle.
- Subscription Interface; The SIP-IX Subscription Interface is an abstract interface, that provides real-time data downloading using Web-server with pull mechanics.
- Customers using the Subscription Interface to interact with SIP-IX data must implement the SOAP client as an implementation requirement.

- This utility is divided into 3 parts including modules like Profile Engine/TN Management/Policy Engine/BDD utility.
- The technology used: Java 5, Axis 2.0, SOAP, Multi- Threading, SQL Queries, Oracle, OOPS.

### Module Lead Software Engineer, Impetus Infotech, Indore, India

MARCH 2008 — NOVEMBER 2010

- ESPP Service; Researched ESPP Protocol Requirement Gathering, Design/Coding.
- Designed a Service Oriented Architecture (SOA) for the Customer who wanted to use Cable labs supported protocol ESPP for provisioning telephone numbers to Mobile Service Operators.
- We have created a service that receives data from SIP-IX and we translate it and keep in our DB in ESPP Format.

The benefit of writing our own service is that by this way we are expanding our business by supporting multiple protocols so that Telco's who works on ESPP can download data from our System, Did complete RND on Axis2.0.

- Technology used; ; Java 5, Multi-Threading, Axis 2.0, XML, XML Beans, JDBC, Oracle.
- ESPP Client; Customer wanted to use Cable labs supported protocol ESPP for provisioning telephone numbers to Mobile Service Operators.
- We have created a SIPIX to ESPP Server convertor. The SIPIX subscribe interface is used for downloading the SIPIX data and provisioning directly to ESPP server.

This requires lots of message format conversion and transactions management between SIPIX and ESPP. Both SIPIX subscribe interface and ESPP Server are web services which are developed with help of axis2.0.

- The service which we use is TITAN Service (3rd party service).
- RND on ESPP and Titan servers. Technology used; Java 5, Multi-Threading.

### System Analyst, Hutchison Max Telecom, Mumbai, India

JUNE 2005 — NOVEMBER 2005

- Web-Application Online Billing System.

## Education

### Master of Computer Applications, Bangalore University, Bangalore

JULY 2001 — AUGUST 2004

Completed Master Of Computer Applications Degree from Bangalore University. For being the distinction holder won the award for it by the Honorable Chairman of

### Bachelor of Commerce (Computer Applications), Barkatullah University, Bhopal

MARCH 1998 — MARCH 2001

For being the topper of the college for continuous 3 years in Graduation got the award for it from Honorable Chief Minister of State, Madhya Pradesh, India

## Courses

### Data Visualization with Python

### Cloud DevOps Engineer

### Functional Programming Principles in Scala