

## NAGA MAHESH TIRUVEEDHULA

Full stack Java Developer | +1 (857) 228-8759 | maheshtiru93@gmail.com

### PROFESSIONAL SUMMARY

- 8 years of professional experience in full stack Java development and all phases of Software Development Life Cycle (SDLC)
- Experience in developing backend end to end applications using core Java, Spring boot, JPA, Hibernate, Servlets, JSP, AJAX, Tomcat
- Worked on developing front end single page as well as even based dynamic pages using Angular, javascript, HTML(and related templates like velocity), CSS frameworks
- Extensive knowledge in core Java including concurrency, exception handling, file handling, generics, collections, IO
- Good knowledge on Lambda expressions and Stream API Java 8 features for bulk data operations
- Experience in design, implementation, enhancements and maintenance of microservices
- Experience in GCP pipelines, dataflow, bigquery, buckets
- Experience in kubernetes and docker containers
- Experience solving architectural problems using design patterns such as Model View Controller(MVC), singleton, factory, builder patterns
- Experience in test driven environments. I have worked for extensive unit test coverage of application using Junit, mockito and also functional, integration tests for the entire service like canaries and validation tests using python scripts
- Experienced in unix and linux environments including debugging issues on dockerized containers on linux servers
- Experience in AWS auto scaling and configuration management
- Experience with database modeling, design and development of stored procedures, packages in relational databases like Oracle, MySQL and experience with NoSQL database schemas
- Extensive experience in version control tools especially in GIT, bitbucket. Also used SVN
- Good knowledge on build tools and package managers like Maven, Gradle and Ant
- Experience in using Log4j logging in the service architecture
- Worked in Agile, test driven and scrum style development
- Experience using various atlassian products like Jira, bitbucket
- Experience with manual deployments using terraform and CICD deployment procedures

### TECHNICAL SKILLS

**Languages and Technologies:** Java, Java 8, JavaScript, Python, JDBC, Spring, REST, SOAP, Agile

**Database:** MySQL, NoSQL(Cassandra), Oracle, Redis

**Shell Scripting:** Linux, Unix

**Web Technologies & Frameworks:** Spring boot, Angular, Javascript. HTML, CSS, Ajax, jQuery, XML, JSON, J2EE, Apache Tomcat, JSP, Hibernate

**Cloud/Containerization/Deployment:** GCP, AWS, kubernetes, Jenkins, Docker

**Tools, IDEs:** JIRA, Service NOW, Eclipse, NetBeans, IntelliJ, Pycharm, Visual Studio Code, Git, GitHub, Maven, Ant, Jenkins, log4j, Junit, Mockito, Grafana, TeamCity, Splunk, Sonar

**Atlassian Products:** Jira, Confluence, Bitbucket

**Operating Systems:** Windows, Linux, MacOS

Proficiency in Microsoft word, excel, power point

## PROFESSIONAL EXPERIENCE

### Walmart - Sunnyvale, CA

August 2022 – May 2023

#### Full Stack Software Engineer - Java (Vendor)

Currently working as a software engineer with prime focus on Java programming. The project business focus is consuming, aggregating, organizing large amounts of data from different upstream teams and provide most of the details of sellable items to downstream.

#### Java applications for aggregating, and processing large items data from upstream to downstream

- Developed Java based batch cron jobs for fetching and aggregating large amounts of data
- Worked on Docker containers, Kubernetes, and Jenkins for build deployments on Walmart Cloud Native platforms
- Worked on Ingestion pipelines for Ingesting large amounts of data from GCP buckets to downstream applications using cassandra and GCP pubsub
- As part of the application development and maintenance, contributed and gained hands-on experience with GCP cloud features like GCP buckets, dataflow, bigquery, pipelines, pubsub.
- Worked on unit tests using Junit, mockito
- Very hands-on with logging, code quality, monitoring and deployment tools such as Splunk, Jenkins, Grafana and SonarQube

### Oracle America, Inc. - Seattle, WA

January 2020 – July 2022

#### Full Stack Software Engineer - Java

Software engineer predominantly in Java full stack development which majorly involves writing core java microservices and Sprint APIs for Email Delivery service at Oracle cloud. My experience here is majorly in 2 projects - writing Spring APIs for the customers to interact and manage necessary resources required to send emails using the service and the second project is writing backend microservices to handle huge email traffic of the customers

#### Spring Boot API to manage all the resources required to send emails

This project scope is to maintain and develop the Spring boot API which is used by the customers to onboard to oracle cloud email delivery service and manage resources required to send emails using the email delivery service

- Developed backend API using Java 8, Spring boot, Spring security, Redis and custom SQL database (JPA style ORM)
- Worked on unit tests using Junit, mockito
- Wrote multiple functional testing components like validation tests and canary tests for java application
- Developed web-based application framework using JavaScript and backend framework using Java, REST APIs
- Validated the automated tests for test case stability and bug tracking using CI/ CD pipeline tool Jenkins
- Worked in Agile work environment using Kanban SDLC for sprint releases
- Part of extensive code reviews, and bug mitigation during operations
- Experience dealing with customer incidents and helping them onboard to the service/resolve their issues and identifying bugs in the service
- Worked on monitoring the service by adding metrics and alarms
- Developed a socket microservice to read the metrics from different microservices using python, tox
- Worked on docker containers and related troubleshooting and deployment of containers

- Production machines are all linux and unix, worked on linux, unix machines for running manual scripts and testing
- Worked on troubleshooting and resolving issues in development, test, and production environments.
- Worked on log management using log4j
- Part of Knowledge transfer team to share Domain, Technology and Project Knowledge
- Extensively used Jira for change management, bug tracking and feature development tickets
- Involved in migrating legacy application from AWS to oracle cloud infrastructure

### **Backend Microservices to receive and handle millions of Email**

This project scope is writing and maintaining multiple microservices interacting with each other and receiving millions of requests. The application processes these requests and sends the email messages to downstream Mail Transfer Agents which in turn sends out the emails to recipient mail boxes.

- Developed backend microservices using Java 8, Redis and custom SQL database and Object Storage
- Involved in developing and maintaining backend application using Java which handles huge email traffic with multiple threads and requiring multiple other service API calls, SSL handshakes and SMTP protocols
- Worked on backend batch processing component which generates billing for the emails of customers using Java, Redis and API calls to billing service
- Contributed for unit test coverage of backend applications using Junit, mockito
- Wrote multiple functional testing components like validation tests and canary tests for java application
- Worked on deploying the service code on multi-region data centers using internal deploy tools which require terraform scripts
- Utilized team city and build service for code builds and deployments and bitbucket for code management
- Utilized Kanban SDLC for sprint releases in Agile work environment
- Extensively worked on linux and unix machines and also wrote startup bash scripts for Docker containers
- Worked on troubleshooting, analyzing and resolving bugs and did extensive code reviews
- Involved extensively in service operations via on-call shift rotations taking care of service alarms and customer incidents
- Worked on monitoring the service by adding metrics and alarms
- Worked on docker containers and related troubleshooting
- Worked with internet protocols and standards SMTP, REST, SSL, and HTTP and used log4j for service logs
- Some of these microservices are acquired which was using AWS, involved in using AWS for Auto scaling and configuration management
- Deployed these microservices using docker container using AWS EC2 container services and AWS admin console
- Involved in migration of the third party microservices to Oracle cloud environment

**KAYAK (kayak.com), Boston, MA**

May 2018 – December 2018

**Software Engineer - Angular, Java, JavaScript, HTML, CSS**

### **Use backend Java APIs and build multiple web application pages for kayak.com**

- Re-built all the web pages which are linked on the footer section of kayak.com with all new designs
- Built an all new functionality “Best Price Guarantee” for UK locale which can be accessed from the home page of kayak.co.uk. This enables customer to claim back the price difference in case a cheaper ticket is found elsewhere
- Resolved bugs on the front home page and flight results page of kayak.com
- Extensively used Angular, Javascript, Ajax,, velocity templates, CSS for most of the project
- Good knowledge of Angular - all web pages were built on Angular and I worked on revamping

many of the static Angular web pages

- Worked on Java applications which are used to fetch data from backend APIs and work as data feeds for the web UI
- Involved in test coverage of Java application using Junit, Mockito, used log4j for log management
- Used bitbucket, git for code management and JIRA for feature development and bug tickets in Agile environment

## **Tech Mahindra Limited, India**

### **Java Developer**

April 2014 – August 2017

#### **Development of Digital COC application**

The Certificate of Conformity is the technical document defined by the European Commission enabling directly through its paper version; The Dutch government decided the eCoc to be in Xml format. Flat file with vehicle details, transferred from Mainframe application through stone branch is picked up by the application and converted to new digital COC data otherwise called IVI (Initial Vehicle Information) file.

- Worked in requirement gathering, design and development of the application
- Involved in implementation of application using conventional design practices (SOA-Service Oriented Architecture, MVC-Model View Controller)
- Developed user interface using Bootstrap, HTML5, CSS3, AngularJS
- Developed a single page application based on MVC pattern using Spring Framework.
- Proficiency in developing Model View Controller (MVC) Architecture based applications using Spring Frameworks.
- Involved in web component design and development using the spring framework.
- Consumed SOAP Web Services to retrieve customer information and integrate with User Interface, used JAX-RS to develop RESTful resources to integrate with Web Interface.
- Created maven archetypes for generating fully functional REST web services supporting both XML and JSON message transformation.
- Developed Data Access Objects (DAO) using JDBC API for Database access.
- Involved in loading and storing objects using Hibernate.
- Have worked on Oracle 11g database for storing and retrieving the application data.
- Calling PL/SQL stored procedures to display data into the database.
- Used JPA with Entity Beans for interacting with Persistence Layer for CRUD operations.
- Developed Spring batch process to create outbound files.
- Used Eclipse for developing JSPs, Servlets, Spring and with JBoss server in the development phase.
- XML was used to create the DB schema-mapping file for Hibernate.
- Configured LDAP server to be used with Spring Security to provide authentication for internal application

#### **Development of IVI Ireland application**

The existing Digital COC application will be extended to Ireland to generate XML file transfer between Nissan and IRL government partners. We need support from each of your areas to meet the legal and mandatory.

- Worked in a TDD (Test Driven Development) environment
- Involved in multi-tiered J2EE design utilizing Spring Inversion of Control (IOC) and Hibernate.

- Writing end-to-end flow i.e. controllers' classes, service classes, DAOs classes as per the Spring MVC design and writing business logics using core Java API and data structures.
- Used Hibernate as ORM tool for mapping data, to send and fetch data from Database.
- Developed the Persistence layer DAO using Hibernate.
- Worked with Hibernate to create mappings to map object model's data representation to a relational database.
- Developed the project using industry standard design patterns like Singleton, Business Delegate Factory Pattern for better maintenance of code and re-usability.
- Developed unit test cases using JUnit framework for testing accuracy of code
- Involved in configuration and deployment of applications on JBoss Application Server.
- Used Tortoise SVN to maintain the version of the files and took the responsibility to do the code merges from branch to trunk and create new branches when new feature implementation starts.

## **EDUCATION**

**Northeastern University, Boston, MA**

December 2019

Master of Science in Information Systems

Related Courses: Algorithms, Web Design, Web Development using Spring framework, Object Oriented Programming Design, Databases, Multithreading

**Jawaharlal Nehru Technological University, Hyderabad, India**

April 2014

Bachelor of technology in Mechanical Engineering

Related Courses: C programming, DataStructures

## **ACADEMIC PROJECTS**

### **Music Web Application using Spotify REST API endpoints - Javascript, Angular**

- Designed this application with client-server interaction, to transfer data using the REST API
- Developed the application with concepts of HTTP, HTML, CSS, JavaScript, Angular, TypeScript, Node.js, Bootstrap
- Application can take client requests, collect data from the REST API, transfer it back to client, enabling browsing music through different channels – artists, tracks, albums, playlists

### **Java Swing Application – Design and development of Ecosystem model - Java**

- Named Community Improvisation System, the application collects data and predicts trends, suggests requirements for three various domains – Health, Education, Safety
- Analyzes data and generates detailed trends and predictions of crime rates, literacy rates and produces analysis in visible forms such as charts and pies