## RAGHAVENDRA RAMAPPA

**SUMMARY**

* Senior Software Developer with **7 years** of experience in Requirement, Analysis, Design, Develop and Execution of web application using Java, J2EE environment.
* Excellent capability to explore, learn and understand newer business domains and technology.
* Proficient in developing web applications using JAVA / J2EE technologies.
* Exploring my knowledge in **Full Stack** development with a latest technologies and features.
* Excellent knowledge in GUI design with HTML, CSS, JAVASCRIPT, Bootstrap, ReactJS,AngularJs.
* Supporting continuous improvement by investigating alternatives & technologies.
* Drove efforts towards maintaining software development practices; adhered to company standards for coding and unit/functional test coverage.
* Demonstrated ability to develop customized applications in a project-oriented environment with aggressive deadlines

## TECHNICAL SKILLS

**Programming Languages :** JAVA 8.0 & 11.0, C, C++,GraphQL

**Web server technologies :** J2EE (Servlets, JDBC, Hibernate, Spring, SpringMVC, Spring Boot2, JPA)

**Framework :** JUnit4, Swagger, Drools 7.15.0.

**BDD Framework :** Genie 9.3.2,Cucumber.

**TDD Framework(UI) :** Jest with Enzyme, Protractor(Angular E2E Testing).

**Web client technologies :** JavaScript, jQuery, CSS, HTML, CSS 3, Angular 1,React JS 16.13.0,Node JS V12.13.1, Redux 4.0.5, Ajax, Bootstrap.

**Database :** Oracle 11g, 12 C, MySQL Cassandra , PostgreSQL.

**Operating System :** Windows, Linux.

**Source Control :** GIT, SVN, BITBucket

**Web Server :** JBOSS, Apache Tomcat, WebLogic.

**Message Brokers :** MQTT, RabbitMQ, Kafka.

**Tools :** Eclipse, Spring Source Tool Suite (STS),Intellij,Jenkins, JIRA, Rally,SonarQube.

**IOT Knowledge on :** NBIOT, NBIOT-SGI, SCEF.

**Working Knowledge on :** JWT based Authentication for security . Zuul Proxy,Eureka based API Gateway Server.

**Devops** : Docker,Kubernates,NGINX,F5Loadbalancer.

**Cloud Platforms** : Redhat Openshift, AWS,Oracle-Cloud.

**Designs :** UML, Design Pattern.

**SDLC :** Agile Methodology

## COMPANIES WORKED

* + **Nokia •Oracle**

**PROJECTS DETAILS**

**Project #1**

Title : **QCA(Qualitative Credit Analysis) Application.**

Company : **Standard Chartered GBS.**

Domain : Banking Project Type : Development Team Size : 5

Role : Senior Full stack Developer (ReactJs with Microservices) Period : May 2019 – till date

**Technologies used:** Ant Design, HTML, CSS, Rest Services, Java 8 && 11 , spring framework, JPA, Spring Boot, React JS, Node JS, Redux, Drools, genie, Junit4, Jest with Enzyme, JWT based Authentication for security.Zuul Proxy,Eureka based API Gateway Server, PostgreSQL, Jenkins, Docker,.

## Project Description:

This is a QCA Application which is developed using ReactJS with Backend Microservices. This app will be used by Relationship Manager(RM) of Standard Chartered Bank. The BCA(Loan Application) Form for New/Interim BCA’s is a word document that is manually completed by the Relationship Manager (RM) and attached to the BCA document in Credit Mate(Legacy Loan Application). The intent of this project is to digitize this manual process and the digitized process will reduce turnaround time for New/Interim BCA and structured client data will enable enhanced analytics and monitoring.

Roles and Responsibilities:

* Worked as a Senior Full developer and involved in requirement gathering directly with PO(Project Owner).
* Mentoring Team members for their issues in code and logical implementation.
* Investigate the technology stack and conduct meeting with leads, managers and explains to them.
* Designing the prototype and implement it with the defined technology stock.
* Creating end to end application using React with Backend Microservices.
* Enhanced the security of the microservices using JWT based token authentications for the users.
* Component creation, Module creation and integrating React code and Rest services.
* Deploy the Application on a timely manner to Openshift cloud platform to host our services.
* Plan and estimate projects and reports hours to administration for billing.
* Allocate the issues to the team member’s with JIRA task number and generate the report.

## Project #2

Title : **Oracle Cloud Rule Engine App**

Company : **Oracle India Pvt Lmt.**

Project Type : Development Team Size : 1

Role : Senior Member of Technical Staff

Period : Sep 2018 – Apr 2019

**Technologies used:** JAVA 1.8, Rest Services, Springboot, Oracle,Oracle-Cloud, Jenkins, JIRA.

## Project Description:

Software as a service (SaaS) allows users to subscribe and use application software in the cloud. A modern cloud suite provides complete software for your entire business so that you can subscribe to certain SaaS applications as needed, such as accounting, HR, marketing, procurement, project management, sales management, service, supply chain, and transportation management**.** This App offers the ability to automatically run the different scripts placed at certain virtual machines(VM’s) and get the output for the user. The script can do some useful stuffs for the endusers like upgrading the JDK version of cloud PODS, get the VM’s of the hypervisors etc.the user will provide the Rule in the form of JSON and the Rule engine will execute the Rules and get the output for the enduser

## Roles and Responsibilities:

* Analyzed the core functionality of the project and requirements duringthe requirements analysis phase of projects.
* Initially explored the Spring Drools to make use for the project
* Later developed the Rule Engine using the SpringBoot
* Wrote the Rest API(Spring Rest) to post a Rule to the Rule Engine,Get allthe VM’s in the pods,Get all the pods for the user etc.
* Exposed the security for the Rest Service using Spring security BasicAuth functionality.
* Made easy for the enduser to trigger the Rule and access the Rule Engine by using the Swagger.
* Deployed the same in the cloud environment where there are thousands of pods in the environment. Successfully able to trigger the Rule even when the number of pods are more.
* Delivered the same before time with high quality.

## Project #3

Title : **Impact IOT Dashboard (Volunteer Project as part of team)**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Senior Software Engineer

Period : Jan 2015 – feb 2018

**Technologies used:** swagger, Jenkins, Serenity, Sonar cube, Jenkins, JIRA

## Project Description:

I took volunteer decision to develop this dashboard, I created a nice-looking dashboard which is a main **NOKIA IOT** interface for all the tools (like **swagger, Jenkins, Serenity, Sonar cube** etc.) and servers we use in our team and QA also using this tool to monitor their testing reports. This UI was well appreciated with in the team.

## Roles and Responsibilities:

* Developed this Dashboard using bootstrap and angularJS.
* Implemented WOLF theme as per the Nokia standard.
* Deployed the same in all the development servers as well as QA severs.
* Enhanced the dashboard to include cross team tools as well.

## Project #4

Title : **VAAT (Video Analytic and Trend Software) Project**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Senior Software Engineer

Period : feb 2017 – feb 2018

**Technologies used:** JAVA 1.7, Spring, Hibernate, CRUD Repository, Oracle 10g, HTML, jQuery, JavaScript, CSS, Rest web services, Angular JS 1, Springboot based microservices, Jenkins, JIRA

## Project Description:

**VAAT** is designed to find, display, and understand normal and unusual activity in video streams. The system requires no need for manual training or setup. Automated setup – or unsupervised learning – is especially important when capturing video from hundreds or thousands of cameras. **VAAT-Alert** is a statistical learning engine. As video is captured, activity is detected, analyzed, and over time activity statistics are determined. The system builds a *trend* of the normal activity for a time-of-day and day-of-week. When activity exceeds bounds of the trend, this event is said to be an anomaly, and an *alert* is generated. The volume of alerts can be regulated by user choice of acceptance levels.

## Roles and Responsibilities:

* Took the responsibility of developing the servlet whichwill generate the URL for the device cameras to be seen in the browser.
* Validated each device against the capability that It supports to view the live camera visuals.
* Functionality support to onboard a VAAT device using AEP API through southbound in IMPACT..

## Project #5

Title : **MQTT-Router IOT Project**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Senior Software Engineer

Period : feb 2017 – feb 2018

**Technologies used: :** JAVA 1.7, Spring, Hibernate, CRUD Repository, Oracle 10g, HTML, jQuery, JavaScript, CSS, Rest web services, Angular JS 1, Springboot based microservices, Jenkins, JIRA,MQTT.

## Project Description:

The **MQTT** is a messaging protocol implemented as a component for IMPACT. It acts as both an adapter and a router. Devices can be connected directly to IMPACT as a MQTT component through an **Adaptation Layer (AL)**. If devices directly connect to a IMPACT MQTT broker, an adapter component is used. When the devices are connected to a remote AL, and the remote AL is connected to a MQTT broker of IMPACT, a router component is used. This will route AL packets received on MQTT transport layer to the **CIG**.

When Adaptation layer sit outside of impact platform and communication channel is MQTT transport layer instead of HTTP then it acts like a **router**.

## Roles and Responsibilities:

* Developed the whole MQTT-Router functionality which supports device onboarding both from northbound and south bound.
* Implemented the functionality to support onboarding ofmqtt-AL(router) devices,Topic- Notify and Register.
* Functionality Support to onboard mqtt-adaptationlayer from northbound through Adaptationlayer API.
* Introduced various new API’s to perform operations on the router devices(Read/write/execute/delete) on a resource.
* Adaptation layer level validations including topic-notify of adaptation layer should be done before registering a device from south bound

## Project #6

Title : **Nokia IOT IMPACT Data Collector (IDC) Project**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Senior Software Engineer

Period : feb 2015 – feb 2018

**Technologies used: :** JAVA 1.7, Spring, Hibernate, CRUD Repository, Oracle 10g, HTML, jQuery, JavaScript, CSS, Rest web services, Angular JS 1, Springboot based microservices, Jenkins, JIRA,MQTT

## Project Description:

**IMPACT Data Collector (IDC)** is a platform for the orchestration of communication between Applications and Devices. It is based on horizontal platform architecture that allows for mixandmatch deployment of all or individual component to meet varying consumer demands and strategies across a wide array of use cases and verticals. **IDC** platform provides granular REST API’s that can be consumed bynorthbound applications. These APIs allows multiple applications to access the device data, filter device data, send data and commands to devices, lifecycle, and resource management. **IDC** platform integrates with southbound devices and gateways which are protocol agnostic. i.e. several adaptations are possible by providing integration layer between

devices and gateways.The **Add Endpoint API**(AEP) is used to create an endpoint in **IMPACT** for the devices that will connect to IMPACT via different protocols adaptors that include **MBUS, Lora, LWM2M, Video Analytics, XirgoOBD, NBIOT and ONT** Gateway Device.

## .Roles and Responsibilities:

* Developed the core **UI** to onboard these different protocol devices(Endpoints) using **AngularJS (**Which will display the parameters dynamically depending on the protocols selected**)**.
* Developed **AddEndPointAPI(AEP)** which is the core API (Rest API) to onboard different protocol devices.
* Protocol level validations while onboarding the endpoints.
* Introduced various new API’s to perform operations on the devices(Read/write/execute/delete) on

a resource.

## Project #7

Title : **Home Automation and Security Control Systems(Volunteer Project).**

Project Type : Development Team Size : 1

Role : Individual Contributer

**Technologies used:** Mqtt-Client,Paho-Mqtt,AWS

## Project Description:

This project is designed by me to increase my IOT Domain knowledge and through it one can simply connect profoundly simple devices to a **Raspberry PI** and control that device through the internet and as well as to save the historical data or any important data in the cloud (**AWS CLOUD**) to view/get it when there is an emergency situations or to provide the security to the home

## Roles and Responsibilities:

* Analyzed the core functionality of the project and requirements during the requirements analysis phase of projects.
* Deciding upon various modules of the project
* Setup the Raspberry Pi firmware and connected the device(camera) to it.
* Generated a THING in the aws cloud which can simulate and control the connected device.
* Generated the public/private keys for exchange of secured information from **AWS** to device via

**RASPBERRY PI**.

* Created a gateway policy and rules to send commands to the connected device.
* Setup the MQTT-Client Connection and controlled the commands to/from camera device through

**Paho-Mqtt** and subscribe/publish a command to message broker. After successful connection one can view the images/videos from that camera device by just using a public IP and can control the same from anywhere in the globe and it will even get stored in the cloud so that a user can view it in case of emergency there by it provides an end to end security**.**

## Project #8

Title : **Machine to Machine(M2M) Project**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Senior Software Engineer

Period : Jan 2015 – feb 2018

**Technologies used: :** JAVA 1.7, Spring, Hibernate, CRUD Repository, Oracle 10g, HTML, jQuery, JavaScript, CSS, Rest web services, Angular JS 1, Springboot based microservices, Jenkins, JIRA,MQTT

## Project Description:

Machine-to-Machine Device Management platform is designed to address increasingly complex architectures and profoundly simple devices. Connected cars, home automation, mobile health and a variety of vertical industries, all enabled by transformations in machine-to-machine (M2M) communications***.***

## Roles and Responsibilities:

* Analyzed the core functionality of the project and requirements during the requirements analysis phase of projects. Analyzed the core functionality of the project and requirements during the requirements analysis phase of projects.

# Deciding upon various modules of the project

* Developed REST API’s for the functionality.
* Implemented UI using JSP and Servlets.
* Introduced new DDL’s and DML’s.
* Generated EXPLAIN Plan and analyzed it for query performance.
* Creation of WSDL’s.
* Written JUnits for Unit testing.
* Developed core functional Rest API’s which were part of IOT Domain project called

IMPACT.

* Helped in setting up the message broker called rabbitMq to all the Intelligent and collocated gateways in the system so that once we enqueue a payload request to gateway it can dequeue and process the request sometime later.

## Project #9

Title : **Smart Customer Interaction(SCI MSM) Project**

Company : **Nokia Networks.** Project Type : Development Team Size : 7

Role : Software Engineer

Period : Aug 2013 – Jan 2015

**Technologies used:** Apache Server, JBOSS, WEBLogic, JAVA 1.6,HTML, jQuery, CSS, JavaScript.

## Project Description:

Mformation Service Manager(**MSM**) offers a complete solution that enables mobile operators, managed service providers (MSPs) and enterprises to remotely manage, support and secure all types of mobile devices across all network types. This project is developed for Operators/Network providers to know more about the network coverage in a particular cell site (LAI) and the duration of time spent by a device (with SIM) in different communication states ranging from 'Out of Coverage' to 'Voice/Data' Service. If Client/Server Initiated coverage monitoring is enabled for a device, and whenever there is a change in network coverage state, data is collected. The same data is also used to generate coverage reports Role Played for SCI:

## .Roles and Responsibilities:

* Analyzed the core functionality of the project and requirements during the requirements analysis phase of projects. 
* Deciding upon the various modules
* Implemented UI using JSP and Servlets
* Wrote a query to generate reports to display on UI. Generated EXPLAIN Plan and analyzed it for query performance.
* Reviewed the code with team for its accuracy.
* Deployed the product and populated lakhs of data in DB for functionality and performance testing.
* Delivered the same before time with high quality.

**Other Job Accomplishments:**

* Technically expertise in client-server technology and stand-alone using JAVA, Servlets, JSP, JDBC, Hibernate and Spring. Deciding upon the various modules
* Trained the new members in the team and helped in getting them productive quickly.
* Enhanced login validation of the product for mandating at least one special character.
* Implemented 'show/hide' of Coverage Monitoring feature based on Device Client Capability.
* Involved in upgrading product from jdk6 to jdk7.
* Deploying builds, Functional testing.
* Implemented ‘Show Location’ of Coverage Monitoring feature based on Device Client

Capability.

* Developed the code to show the exact current location of the device based on the latitude and longitude of the device.
* It shows the exact map of the device.
* Written YUI UI to display Configuration settings for a Gateway.

**TRAININGS**

* Enrolled and learned lot of new technologies in **UDEMY**.
* Attended training on Open Shift Container Management platform.

## EDUCATIONAL QUALIFICATION

BE/BTech in Computer Science from **Sri Jayachamarajendra College of Engineering** (JSS University) Mysore,

Graduated **First class with Distinction.**

## AWARDS & ACHIEVEMENTS

* Won an award for completing most important **Dubai Smart City(DU) Project** on time apart from normal deliverables**(Professional Achievement**).
* Secured **88th rank** in DIPLOMA CET out of **50000 students** and got into one of the most prestigious college of Karnataka called SJCE it is one of the top 5 colleges inKarnataka.
* Received a Medal from GGVP Community for scoring highest marks in HINDI.
* Actively presented many Tech sessions to juniors in college as part of LCC Team of college.
* Presented a tech talk on “**4G LTE TECHNOLOGY**” to new joiners and interns inoffice.
* Secured highest mark in **“Ramayana”** mythological contest.
* Participated in NCC and secured a rank of CADET in my schoolings