JEYA PRAKASH THANIGAIVEL

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Experience Summary

Software Developer with 8 Years of Experience in Telecom and Media Domains

- Strong creative, analytical, problem-solving, communication, and teamwork abilities.
- Collaborated with business clients to analyse new requirements and deliver accurate solutions from on-site locations.
- Researched emerging technologies and frameworks, proposing innovative ideas to enhance product performance.
- Participated in business requirement meetings, assisting architects in customizing products to meet specific client needs.
- Conducted performance analysis using Java profilers for each release, resolving performance-related issues.
- Experienced in the Software Development Life Cycle (SDLC), defect tracking, and user documentation.
- Quick learner with the ability to adapt to both Agile and Waterfall methodologies.

Technical Skills

Programming Languages	:	Java, Python
Frameworks (Java)	:	Spring ecosystem (Spring, Spring Boot, Spring Data) Hibernate, Apache Camel
Frameworks (Python)	:	FastApi, Pydantic, PyMongo, Pandas, ReportsLab
Application Servers	:	JBoss eap 7.0, Tomcat, Apache Karaf, Gunicorn
Web Servers	:	Nginx
Relational Databases	:	Oracle, MySQL
Distributed Systems	:	Apache Kafka, Hazelcast, Cassandra, Atlas MongoDB
Cloud Technologies	:	AWS, Azure
POC	:	Apache Flink, Uber Cadence, Apache Spark
Version Control Tools	:	SVN, GitLab
Methodologies	:	Agile, Waterfall
Domain Expertise	:	Telecom (Revenue Management), Media
Operating Systems	:	Linux Distributions, Mac OS, Windows Family
Tools	:	IntelliJ Idea, Eclipse, Datadog, Splunk
Certification	:	AWS Certified Solutions Architect – Associate

Work Experience

Comcast India Engineering Center
1 Year 10 Month | Nov'22 -- Present

Development Engineer 3, Cloud Video Platform
Nov'22 – Present
Chennai, India

- Involved in the product discovery phase to build a solution aimed at globalizing existing services, optimizing costs, and reducing latency, targeting 2000 TPS average and 3500 TPS at peak.
- Part of a team responsible for designing a data model tailored for DynamoDB as a purpose-built database.
- Involved in developing an event-driven architecture using Amazon MSK, with gRPC for inter-service communication and mTLS for authentication.
- Migrated the HashiCorp Consul client service from sidecar to Daemon Set, improving stability and maintainability.
- Successfully transitioned multiple on-prem services to AWS Elastic Kubernetes Service (EKS), provisioning and managing necessary resources.
- Enhanced Couchbase n1Query performance from 8.6s to 207.3ms through keyset pagination, and recommended data model adjustments to align with current capacity planning needs.

Skills: AWS, Spring, Hibernate, Kafka, DynamoDB, Splunk, Datadog, Kubernetes, Opentelemetry

Tata Consultancy Service
6 years 5 Months | Jun'16 – Nov'22

Senior Platform Developer, HOBS
HOBS Product Development Team, Feb'22 – Nov'22
Chennai, India

- Designed and developed highly customizable event-based usage charging system using Saga's Choreography pattern which is flexible to integrate to any persistence store.
- Delivered product technology upgrade program by migrating third party framework (Kafka, Cassandra, Hazelcast) to latest version without losing existing feature.
- Deployed existing code into Azure Kubernetes Service for US based electrical distribution company for their digital subscription management.
- Proposed a design change in bill run process by demonstrating a POC using distributed processing framework (Apache Flink) in batch mode by representing dependency in Directed Acyclic Graph structure.
- Demonstrated orchestration engine using Uber's cadence framework for integration with other system at ease.
- Supported architect to build cloud-based solution for end-to-end subscription management platform as a service model.

Skills: Azure, Kubernetes, Docker, Flink

Module Lead Developer, HOBS (On-Site)
HOBS Implementation for Communication Service Provider, Apr'21 – Jan'22
Makati, Philippines

- Driving new implementation program as technical lead for Revenue management module for the leading telecommunication operator in Philippines.
- Designed and developed scalable notification system using Transactional Outbox pattern with Apache kafka, Cassandra and Spring boot framework.
- Developed highly customizable framework using Pandas which reduces the execution time when compared to existing spring batch
- Implemented real time CLM which communicates with network management system to disconnect customer from network after due date. This also reactivates the user after payment in real time.
- Designed and developed a module which integrates with Payment Gateway (Braintree) to enable end customers to opt for auto debit payment or pay their outstanding bills online

Skills: Azure, Spring Batch, Hibernate, Spring boot, Spring Data, Spring, Kafka, Cassandra

Integration Lead Developer, HOBS (On-Site)
HOBS Implementation for Enterprise Communication Service Provider, Jan'20 – Feb'21
Makati, Philippines

- Led product upgrade program for existing customer from onsite by involving in new requirement and enhancing existing product feature ensuring features are delivered as per customer requirement and on time and made the product to go-live in committed date.
- Developed highly reactive framework with non-blocking I/O using spring webflux library to interact with different channels.
- Developed a data integration tool for business intelligence and bill formatter using pandas framework which helps customer to take better business decisions.
- Developed a framework to load existing data from relational tables into distributed in-memory data grid framework (hazelcast) in few seconds by fixing performance related issues using datadog.
- Integrated with real time electric charge stations which ensure users can use their vehicles for effective charging within their credit limits.
- Migrated existing product to support various message system (kafka/event hub) depending on client requirements.
- Proposed a design change in bill run process by demonstrating a POC using distributed processing framework (Apache spark).
- Demonstrated rating system as FaaS using Azure serverless computing service azure functions.

Skills: Spring boot, Spring Data, Spring, Hibernate, Kafka, Cassandra, Hazelcast, Datastax DevCenter

Product Offering Developer, HOBS
HOBS EV Charging Solution, Jun'19 – Dec'19
Chennai, India

- Developed application using adaptor design which accepts the request from EV charging device which is based on Open Charge Point Interface protocol to integrate with our charging system.
- Developed Prepaid wallet management system, where customer can opt for duration or amount for which electric charge to happen, this will request charging device to stop when the balance drained out
- Developed Mobile APP, Enterprise Selfcare, Customer on Boarding integration

Skills: Azure, Spring boot, Spring Data JPA, Apache Kafka, Hazelcast, Mysql

System Engineer, HOBS
HOBS Product Development Team, Jun'18 – May'19
Chennai, India

- Developed mediation system which will transfer the incoming file from network switch to present system understandable format using apache kafka as streaming platform.
- Developed configuration based multiple objects mapping framework using dozer mapping framework for mediation system which helps in integration with several third party system with ease.
- Enhanced rating engine module performance by introducing distributed in-memory data grid framework hazelcast.
- Developed microservice based architecture using spring boot which acts as bridge between rating and mediation system and to interact with hazelcast.
- Involved in developing real time credit level monitoring (CLM) system using apache camel framework which notify the end user after reaching their credit limit.
- Developed dynamic query framework which helps in framing dynamic queries based on the request using spring data jpa specification executor.
- Developed microservice architecture using spring boot which serves as integration layer between notification system and CLM.
- Exposed a Restful webservice which interacts with cassandra using spring data cassandra framework.
- Analysing the jmeter
- Enabled swagger-ui for product api specification and making clients to understand our api quickly and experimenting our individual modules during demo.

Skills: Spring boot, Spring Data, Apache Karaf, Apache Kafka, Cassandra, Hazelcast, Apache Camel

Assistant System Engineer, HOBS
HOBS Product Development Team, Jun'16 – Jun'18
Chennai, India

- Enhanced the product transaction management to support JTA from JPA to handle transactions across multiple resources.
- Enhanced the product to support easy switching between standalone and distributed caching techniques which becomes handy in multi-node environment through configuration changes.
- Enabled configuration driven architecture to retrigger suspended/error request from various systems and maximising product performance by avoiding duplication call of code.
- Developed bulk processing framework using spring batch to reprocess suspended request.
- Involved in migration of product to latest version of spring (v4.3.4) and hibernate (v5.0.9) framework to support new features.
- Responsible for transformation of product to support RESTful web services api which helps in integration with other third party system.
- Delivered a critical product module by achieving cent percent junit coverage.
- Involved in enhancing product functionality by developing couple of features to adhere Telco needs using spring and hibernate framework.

Skills: Spring, Spring Batch, Hibernate, Restful Webservice, Mysql, Oracle

Personal Project

Project : E-Commerce Platform for Start-ups
Oct'23 – Present
Chennai, India

- Designed and Developed order, product management system for online purchase.
- Integrated with various Payment Gateway System such as EaseBuzz, Phonepe to accept online payment.
- Developed notification management system to integrate with various notification provider, currently we have integrated with WhatsApp Cloud API for order confirmation and Gmail for admin login using OTP.
- Developed document generation system using reportslab framework to provide acknowledgement receipt for end customer after order confirmation.
- Developed authentication system using JWT for admin user.
- Developed sales report using Pandas framework for admin user.
- Deployed application in AWS EC2 instance.

Skills: FastAPI, Pymongo, Pydantic, Reportslab, Pandas, WhatsApp Cloud API, AWS, S3, Lambda, Nginx, Letsencrypt

Project : Sample Management Platform for Start-ups
May'23 – Present
Chennai, India

- Designed and Developed document management system which records the blood samples and imaging collected from customer.
- Deployed application in AWS EC2 instance and for cost optimization have schedule event which will stop the server in non-business hours

Skills: FastAPI, Pymongo, Pydantic, AWS, S3, Lambda

Achievements & Awards

- Star performer for handling many projects as a fresher.
- On the spot Award for learning new technologies and developing many POC quickly.
- Debug Ninja Award for debugging activities and quick response.
- Quick Learner award in Comcast for adapting to new environment.

Education

Bachelor of Engineering in Electronincs and Instrumentation – 2016
Bannari Amman Institute of Technology - Sathyamangalam, Tamil Nadu.

Personal Details

Date of Birth	:	19.08.1994
Sex	:	Male
Marital Status	:	Single
Languages	:	English, Tamil
Nationality	:	Indian