

SUMMARY

I specialize in the design and implementation of distributed systems using the tenets of the Reactive Manifesto with Scala, Akka and the async stack. I believe in responsible design through functional programming with an abundance of test coverage. I love to code, present and help others work through the challenges of distributed computing.

SPECIALITIES

Microservices, Reactive Systems, Reactive Programming, Distributed Systems, Fast Data Architecture, Message-Driven Architecture, Event-Driven Architecture, Resilience, Elasticity, Scalability, High-Availability, Concurrent Programming, Functional Programming, Object-Oriented Programming, Domain-Driven Design, Open Source Strategy, Test Driven Development, Industrial IOT Continuous Integration, SDLC , Agile, Leadership

SKILL

- **Serverless** : Akka serverless , AWS Lambda
- **Microservices** : Akka http, lagom, Play Framework, Kafka Alpakka
- **Functional Programming** : Scala, Scala.js, Java and other languages
- **Streaming engines** : Akka Streams, and Kafka Streams, Alpakka Stream
- **Reactive Systems** : Event-driven, scalable, resilient, and responsive applications using the Lightbend Reactive Platform, especially Akka
- **Distributed Systems** : Polyglot Persistence, Cassandra, Janus Graph, Kafka Stream, Akka Persistence
- **Message-Driven Architecture** : Akka actor Model asynchronous.
- **Event-Sourcing CQRS**: DDD, Akka Persistence
- **Fast Data Platform**: Apache Kafka, Apache Spark, Mesosphere DC/OS, Apache Flink, and Lightbend Reactive Platform, including Akka, Akka Stream
- **Cloud Orchestration** : Akka cluster, Kubernetes DC/OS, minikube deployment pipeline, AWS.
- **Industrial IOT**: mqtt egress
- **API platform**: Akka Http, Play, lagom, gRPC, postman
- **Security Practices**: Microservice web-gateway JWT authentication, RBAC authorization.
- **User Experience**: React.js redux, flow, bootstrap, WebSocket
- **Test Driven Development**: Scala Test, JUnit, specs2 and Scala Check
- **Continuous Integration**: Mesos, AWS ECS, Docker
- **Software Development Lifecycle**: Agile Scrum , Sprint capacity planning, prioritize and validate requirements, Sprint Review & Sprint Retrospective meetings, Work Breakdown structure, prioritize and develop software release planning
- **Team Leadership**: Mentor, approachable, consistent, facilitator, respectful, negotiator, delegation, motivator, community building

EXPERIENCE

07/2020 to current **Senior Consultant**
Lightbend. - Bangalore India

- Design, construct stateful microservice using akka serverless.
- Design, construct, test, deploy, monitor and scale Reactive solution.
- Architect massive scalable backend and data pipeline for real time system.
- Performance tune akka and stream application and threadpool.
- Formulating frictionless upgrade path for legacy play lagom apps to akka http
- Pioneered architectural leadership, to create reactive, scalable applications.
- Responsible for formulation of solution and strategy keeping focus on reactive design principle.
- Aggregated data to help shape the future of Lightbend's products, and give engineers relevant product feedback
- Formulate Microservice best practices and customer trends, and document the shared experience of our customer-facing engineers

01/2016 to 03/2020 **Platform Architect**
Intercax Technologies. - Bangalore India

- Design and implementation of a distributed system architecture based on event sourcing and a highly scalable, resilient, reactive, Cloud native microservice platform.
- Design/Development of a Kafka Alpakka stream fast data connector for enterprise application.
- Responsible for formulation of solution and strategy keeping focus on reactive design principle.
- Evangelist for new age technology adoption in team and in corporate strategy.
- Responsible for devising strategy for product deployment, migration for cloud and on-premise
- Develop and evolve technology strategy, aligned to and prioritized by business objectives
- Facilitated Release Planning, Sprint Planning, Backlog Grooming, and Retrospective meetings

- Removed team impediments daily to allow the team to deliver the sprint goals and deliverables.
- Facilitated team and cross-team Retrospectives to build good working relationships
- Collaborated with members of the Product, Business and Engineering Teams to develop and maintain Product Backlogs
- Communicate technical decisions to non-technical audiences and build consensus around them
- Articulate the value of foundational technology approaches to business executives (e.g. the pros & cons of microservices architectures in a given context)
- Own key relationships both up and downstream of the platform teams to ensure delivery.
- Manage priorities and make decisions in high stakes scenarios

11/2013 to 01/2016 **Solution Architect**
Tata Consultancy Services Ltd. - Bangalore India

- Design and implementation customer experience management system for major healthcare company
- Designing the integration pipeline for issue management of product data in Windchill PLM system
- Responsible for devising strategy for migration of legacy product issue data to CEM System
- Responsible for moderating business stakeholder on requirement and technical specification
- Designing implementation strategy for automated customer issue creation based on user complain as per FDA regulation
- Develop role-based app on top of Thingworks, PTC Windchill IOT Platform
- Develop and integrate data from physical products, web-based resources, and enterprise software systems to deliver valuable insights
- Devise authorization strategy of sensor, sales, in use, data as per PTC windchill authorization framework

12/2010 to 11/2013 **Sr. Software Engineer**
Volvo India Pvt Ltd. Bangalore India

- Requirement Analysis of new change Request toward PDMLink functionality. Provide end to end delivery of such requests co-coordinating with development testing and AO team.
- Responsible as Volvo site India Maintenance Assignment co-coordinator.
- Responsible for investigating, devising a new interface to enable PDMLink communication with other enterprise applications.
- Designing and Developing Services, Adapter, Listener to take care of PDMLink proactive communication with other applications.
- Devising solution involving info engine, toolkit etc. to take care of customized batch process in plotting publishing export import.
- Responsible for system performance, auditing of PDMLink infrastructure
- Responsible for runtime troubleshooting of PDMLink Infrastructure to uphold our commitment of SLA/OLA to customers.
- Responsible for devising strategy for knowledge sharing session on PDMLink and related process to enable cross function knowledge exchange between PD/AD team in site BLR
- Responsible for envisaging future resource, skill, expertise plan/strategy required for VPDM Project ramp up. Helping in assessing candidate skill as being part of the interview panel.
- Influence / coach enterprise architecture on modern evolutionary platform architecture principles and practices
- Develop and communicate measurements of platform progress and business impact
- Support organizational changes regarding capability development, restructuring toward product-centric team models, and transitioning to modern agile SDLC practices

05/2010 to 12/2010 **Software Engineer**
IBM INDIA Pvt. Ltd. Bangalore India

- Requirement Analysis of Business Process Mapping, Application, integration with ERP and Multi MCAD tool
- Developing info engine services for publishing enterprise metadata in ERP
- Developing custom JSP page to facilitate customer specific report using info engine Talib.
- Developing custom JSP, PL-SQL script for object count, Change management report.
- Developing Windchill Api based custom code to modify soft attribute, lifecycle state
- Developing Database query to get, file size, vault location, most commonly used document, part, purgeable object etc.
- Responsible for weekly and monthly maintenance and health check activity using Windchill Utility.
- Planning Executing db. aphelion backup and disaster recovery,
- Performing Administration on Workflow, vaulting, Replication
- Performing health checks of tomcat and Apache and monitoring performance.

- Analyzing security vulnerability and its remediation as per IBM standard policy.
- Responsible for coordination with PTC for SPR & temp patch.
- Performing rehosting/cloning of production to dev and QA environment.
- Responsible for testing & documentation of custom functionality while planning for upgrade/enhancement.
- Responsible for client interaction and seeking domain know-how for process mapping.
- Planning hardware requirements and sizing.

08/2007 to 05/2010 Application Developer
Tata Consultancy Services Ltd. - Bangalore, India.

- Requirement Analysis of Business Process Mapping, Manufacturing Publishing Requirement, Information flow across another PLM
- Study the Out-Of-Box/Custom Pro-e/Toolkit integration with Windchill.
- Mitigating the Road Map for Custom Publishing through Windchill Object Adapter.
- Customizing Windchill Cad Agent Worker Class for publishing requirements.
- Designing, customizing and Testing OOTB Publish Block workflow for publishing requirements.
- Designing, Testing and customizing Approval/Review workflow for mapping Cummins change management process.
- Designing and customizing the Windchill Loader to upload Office and AutoCAD Document in bulk.
- Designing and customizing Windchill for inflow/outflow of metadata to other PLM systems.
- Responsible for formation and leading a team of three members in fulfilling the above-mentioned requirement.
- Responsible for suggesting and mitigating a roadmap so that Cummins all manufacturing processes get mapped to Windchill.
- Responsible for formulating strategy for Upgrading Windchill 8.0M030 to Windchill 9.1
- M040 with focus on risk area, production downtime, and rollback. Responsible for carrying out the WINDU, Upgrade Manager, and different healer script.
- Developed C++ platform tool to automate the extraction of data from legacy databases.
- Developed legacy API application tool to validate the extracted data.
- Developed java platform tool to call different PLM system environments during the extraction, staging and import of data.
- Developed C++ based TCE ITK tool to create objects in bulk in Teamcenter PLM.
- Developed oracle utility to process the data in the staging area.
- Developed java platform tool to automate the import of data through CAD MANAGER.

ACTIVITIES AND HONORS

- Certified Reactive Architect
- Co-Author of international paper: **MBSE++ paper for INCOSE IS 2016 (Jul 16-18, Edinburgh, Scotland).**
- Participant in APCOSEC **Bangalore Nov 9-11, 2016**
- Represented Interacx at **INCOSE IS 2017**
- Co-Author **AOSEC 2019** paper: **Spinning a Smart, Digital Thread for MBSE of Cyber-Physical Systems**
- Lightbend forum contributor
- Lagom community contributor
- Play Forum practitioner

EDUCATION AND TRAINING

2007 Bachelor of Engineering: Mechanical
Manipal Institute of Technology. - India.

- Integrated Learning program – covering PCMM, Project Management, System Analysis, Design, Implementation, Technical Review, Quality Management (iQMS), Team Skills, Six Sigma and Soft Skills etc.
- SOA-service oriented architecture
- PTC Pro-Intralinks
- PTC Windchill
- SIEMENS Teamcenter