

Nirbhay Kumar

Java Architect/Solution Architect

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Professional Synopsis

Total 17+ year of professional experience in Java, JEE/J2EE, Microservices, Big Data and Data Analytics, Cloud Computing (AWS), Virtualization and IBM BPM. 8-year experience in Telecom and Finance Domain. 4-year experience in Cloud Computing using AWS. 2-year experience in Cloud Storage Solution using Data Protection Storage, Data Protection Software, Integrated Appliances. Skilled in all phases of the software development life cycle. Expert in translating business requirements into technical software solutions and fanatical about quality, usability, security and scalability.

- Designed dozens of software solutions driving continuous improvement to processes, systems and workflow and customer responsiveness.
- Experience in Agile using SCRUM best practices. Ensured the release of premium and secure experiences for users. Mentored development teams.
- Experience in DevOps tools. Understanding of CI/CD pipeline using Jenkins, Docker, Kubernetes and Cloud native computing platforms.
- Extensive experience in Architecture, Developing, Designing, Time Estimation, Handling of Team, Code Review, Client interaction, Requirement gathering and start to end project execution. Experience of expand application architecture, functional and detailed design requirements.
- Professional experience in Core Java, JEE/J2EE, Spring, Hibernate, REST API, Web Services.
- Experience in Java Full Stack Developer and worked as Individual Contributor (IC). Passionate to learn new technologies very quickly.
- Professional Experience in Microservices using Spring Boot 2.3, Spring Cloud (Zuul Proxy, Eureka Discovery, Hystrix, Kafka, Zookeeper), Actuator, Spring Data, Spring Security, Spring Reactive programming using webflux and more. Exposure in Microservices Design Pattern - API Gateway, Service Discovery, Circuit Breaker, Event Sourcing. Deployment of Microservice using Docker Image, Docker Swarm and Kubernetes containerization/ orchestration platform.
- Used multiple version/source control tool like Tortoise, Git, Perforce.
- Experience in Java performance tuning using Java Profilers, JMeter and Visual VM. Expert in Java and JEE Design Patterns. Exposure in NoSQL DB.
- Expert in Relational database concepts, SQL, DBA, large scale database design, DB performance tuning, normalization, ER-Diagram and more.
- Good experience in Analysis of project by making UML(UML2) using StartUML, MS-Visio. Designing, LLD, HLD, Data Model and other project related documents.
- Experience in Cloud Storage solution using various VMware cloud product and DELL Appliance.
- Expert in Object-Oriented and Functional Programming concepts.
- Experience in Financial Domain using Payment Domain.
- Exposure in Big Data using HDFS, Spark+Scala, SQOOP, Flume, Hive, Pig, Oozie.
- Good understanding in Machine Learning using Python. Exposure in SL (Regression and Classification), USL (Clustering and Association) and RL. Understanding of various Algorithm - Linear and Logistic Regression, Decision Tree, SVM, Naive Bayes, KNN, K-Means, Random Forest, Q-learning and SARSA. Knowledge of Probability and Statistics for ML. Understanding of Data Visualization using Tableau and Power BI.
- Exposure in Cloud Computing using AWS - EC2, Load Balancer, Auto Scaling Groups, Lambda, Elastic Beanstalk, S3, RDS, CloudWatch, CloudFormation, Virtual Private Cloud (VPC) etc.

- Experience in IBM BPM - Process Design, Modeling, Development, Deployment and Testing.
- Good knowledge of Serverless Development using NodeJS, AWS Lambda and DynamoDB.
- Good understanding of Reactive (RxJava 2), Concurrency, Parallelism, Asynchronous, Event Driven App.

Organizations

- *Senior Consultant – Capgemini Technology Services India Ltd, Pune - Since Jan-2014.*
- *Module Lead - Persistent System Ltd, Pune - Nov-10 to Jan-14.*
- *Senior Software Engineer - IBM India Ltd, Pune - From Jan-10 to Nov-10.*
- *Senior Software Engineer - Inventum Technologies Pvt Ltd, Noida - From Oct-08 to Jan-10.*
- *Software Engineer - TBM Technologies Pvt Ltd, New Delhi - From Oct-07 to Oct-08.*
- *Programmer - Aptara Corporation & ResearchCo Reprints, New Delhi - From Jul-04 to Jul-07.*

Professional Qualification

- *Master of Business Administration (MBA) – June 2013 in Finance.*
- *Master of Computer Application (MCA) - In June 2004.*
- *Bachelor of Computer Application (BCA) - In June 2002.*

Skills Profile

O.S.	Windows, Unix/Linux (Red hat, Ubuntu), MAC OS
Java, JEE/J2EE	Core Java 11, JDBC 4; Servlet 3; Web Services (SOAP, REST), JAX-WS, JAX-RS; EJB 3; Struts 1.2 & 2; Groovy and Grails; Spring (Core, Bean, Context, Security, AOP, ORM, REST, MVC, Repository, Transaction and Propagation); JPA 2, Hibernate 3, iBatis, GORM; Java Core Design Pattern and JEE Design Pattern.
Microservices	Spring Boot 2.3, Spring Cloud (Config, Netflix (Eureka, Hystrix, Zuul, Archaius), Cloud foundry, Sleuth (Zipkin, HTrace), Kafka, Zookeeper); Docker, Kubernetes, Cassandra, Redis.
Cloud Computing (Primary Skill)	AWS using EC2, Lambda, Elastic Beanstalk, CloudWatch, CloudFormation, Virtual Private Cloud (VPC) etc; Google Cloud Platform (GCP);
API Design	RAML, Swagger, Sandbox and Mulesoft Anypoint Studio.
Virtualization	VMware (vCenter, ESXi, DS etc.), difference Appliance and their API, VI Java SDK 2.5 API using through ESXi and vCenter Instance.
Big Data	HDFS, Spark+Scala, SQOOP, Flume, Hive, Pig, Oozie.
Data Analytics	Machine Learning using Python; R Programming; Tableau.
DevOps	Git, SVN, Ant, Maven, Gradle, GitHub, Perforce, Jenkins, Rally, JIRA, VersionOne, Bamboo, Hudson, Puppet, Splunk, Ansible, Nagios, Docker, Chef etc.
UI & Scripting	JavaScript, Angular, Node JS, React JS, Typescript; Shell Script and Expect Script.
Web, App Server	Oracle WebLogic 10gR3, Tomcat 8, IBM WebSphere 7, JBoss 5, Glass Fish 3.
RDBMS	Oracle 11g(PL/SQL), DB2 9.7, PostgreSQL 8, MSSQL 2012, MySQL.
NoSQL	HBase, Redis, Cassandra, mongoDB etc.
IBM BPM	IBM WLE 7.2(Process Center, Process Server), IBM BPM 7.5.x.
Domain	Open Banking and PSD2, Banking-Finance, Mobile-Telecom , Print-Media, Oil-Gas, Pulp-Paper, Railway, Cloud Storage, Energy etc.
Telecom Skills	TCP/IP, SS7 (IAM, ISUP), SMPP Protocol, Kannel, RADIUS (AAA, Billing), Socket Programming (TCP, UDP, Socket Channel), SMTP, Android 4 App Dev.
Other Skills	UML, Database (Optimization, Tuning, Normalization, ERD); FP Estimation; Data Structures, Algorithm; Operations Research, Project Management; IOT; Cyber Security, Ethical Hacking using Kali Linux, Blockchain and Crypto currency.

Professional Experience

Current Project Name: Personal Banking Processing	Duration: Feb 2020 – Present
Role: Application Architect	Client: Barclays, UK

Responsibilities:

- Designing various D2C API using Open Banking standard and PSD2 regulations.
- Active participant of **API Engineering** team.
- Involved in various activity of Onboarding API.
- Interact with different stack holder and discussed API level changes.
- Involved in various layer of API Design using System API, Process API, Experience API design principles.

Environment: *Java 11, Spring 5, Microservices, Spring Boot 2.3, React JS, AWS, RAML, JIRA, Akana Gateway etc.*

Engineering and Product Lifecycle Management platform (SOVELIA)	Mar 2019 – Jan 2020
Java Architect	Valmet, Finland

Responsibilities:

- Integration of Sovelia with various application as for Catia v4, AutoCAD, SOD, PDM, SCM etc.
- Automation of various functionality in Sovelia.
- Interacting with client and freeze the requirements.
- Coding, code review and design of RESTful API using Spring Boot.
- Technically mentored development team and enhance their technical skill and working efficiency.
- Deployment of application using AWS platform.

Environment: *Java 8, Spring 5, Microservices, Spring Boot 2.1, Spring Cloud (Netflix Eureka, Hystrix, Zuul etc.), AWS, Docker, Kubernetes, Kafka, REST API, React JS, Red Hat 7, PostgreSQL etc.*

Project Description: SOVELIA is an easy-to-use and extremely productive Engineering and Product Lifecycle Management platform, based on modern technology.

Integrated Data Protection Appliance (IDPA)	Apr 2017 – Feb 2019
Senior Consultant	Dell EMC²

Responsibilities:

- Analysis and designing of new requirement.
- Integration and configure of various VMware and Dell appliance using their API.
- Build release and version management.
- Deploy of IDPA on various appliance with different model.
- Sprint planning and implementation, coding and code reviewing.

Environment: *Java 8, Spring 4, REST API, VMware Infrastructure SDK 2.5, DevOps, CI and CD pipeline using Jenkins, Expect Script, Python, Angular JS, VMWare Tool (ESXi, vCenter, Datacenter, VSAN etc.), EMC Tool (Avamar, DD, DPS, DPA etc.) etc.*

Project Description: The IDPA protects virtual and physical clients, different types of file systems, applications, and databases. It also provides deduplication, backup, reporting, and search capabilities. The Integrated Data Protection Appliance (IDPA) combines multiple hardware and software solutions into a single product. The solution includes an Avamar backup server with optional NDMP Accelerators, a Data Domain system as the target backend, compute nodes for Data Protection Advisor (DP Advisor) and Data Protection Search (DPSearch), and a Dell networking switch for improved setup speed. The system software for each component is installed and configured to the greatest extent possible before the appliance is shipped. Avamar or Avamar Virtual Edition (AVE), Data Domain Operating System (DD OS), DP Advisor, DPSearch, VMware ESXi, vCenter, and VMware VSAN come embedded on the appliance.

Digital Banking Payment Solution (Webseries)	Jul 2016 – Apr 2017
Technical Lead	Bottomline Technologies

Responsibilities:

- Performs production support and troubleshooting and maintenance defects.
- Debugging, coding and code review of production defect.
- Documents code changes and unit test results per best practices.
- Analysis of SQL preformation tuning and statistics report.

- Active participant of Tier1 Production Support (TOPS) team and their activity.
- Various performances monitoring and reporting of pre-production environment.
- Daily basis onsite status calls with client.

Environment: Java 7, Struts 1.2, Oracle 11g SQL and DBA, SOAP and REST, Spring 3, Java Script.

Project Description: WebSeries is a web-based Payment Lifecycle Management. WebSeries provides E-system capabilities to their clients. It also provides a robust set of features which enable cash management, securities processing, and trade finance applications.

Budget Order Tracking System (BOTS)	Jan 2015 – Jun 2016
Technical Lead	Hewlett-Packard

Responsibilities:

- Requirement gathering, analysis and design.
- Collect external data and upload to test and production environment.
- Sprint planning and implementation, coding and code reviewing.
- Demonstration to product enhancement ideas to client.
- Build release on test and production environment.

Environment: Groovy and Grails Frameworks, Java 7, GORM, Spring 3, MSSQL 2012, Knockout JS, jQuery, JSON, Sprint Security, i18n etc.

Project Description: The BOTS utility eliminates the necessity of tracking multiple spreadsheets for each business. Having all business data for quarterly purchases in a single database will provide a “*single version of the truth*” when VDU Operations and Infrastructure Management teams examine the requests and orders. The teams can generate reports and track order status through the quarter.

Railway Alert/Alarm System (WIMS)	Mar 2014 - Sep 2014
Technical Lead	Sydney Train

Responsibilities:

- Analysis of sensor data and plot various type of Chart on generated sensor data like AoA, WILD, TSS, OSS, BBT, WB and many more sensor.
- Requirement gathering, implementation and product enhancement.
- Coding and code review.

Environment: Java 6, Ibatis 3, Spring 3, Struts 2, EJB 3, IBM Web Sphere 7, SOAP, REST, Oracle 10g etc.

Project Description: Railway Alert/Alarm System is a platform to aggregate wayside source data and correlates it with Railways systems to produce one consolidated view for the captured data. The data is used for alerting purposes through the web interface and analysis purpose through business intelligence reports. Project support owner, operator and maintainer of the train/vehicle in making effective contingency plan for any possible catastrophic incident. It monitors any deviation in speed and could be able to prevent loss of life, asset and money of the involved parties. Effective control on the daily operations of the trains and help to understand the driving tendency of the driver.

Crude Oil Well Analyzer (iWellAnalyzer)	Jan 2014 – Mar 2014
Technical Lead	Schlumberger

Responsibilities:

- Requirement gathering and implementation.
- Real time analysis of well drilling machine sensors data and optimizes well drilling performance and minimize risk as well as calculate the drilling cost.
- POC and demonstration to client.

Environment: Java 6, REST, Hadoop 1, MapReduce, HBase, Redis, Storm, JSP etc.

Project Description: iWellAnalyzer is the web-based application wherein admin operator can view multi-well information. While drilling well real time analysis can be achieved using this web application. Admin can gather the well information like True Vertical Depth (TVD), Stand Pipe Pressure, Surface RPM, Drilling Direction, Equivalent

Static Density (ESD), azimuth depth and annular temperature during well drilling which helps him to monitor whether drilling process is going smooth or some alerts are there. This enables the driller to optimize drilling performance and minimize risk of well drill as well as calculate the drilling cost.

Portal Development for the Cloud	Mar-2013 to Dec-2013
Module Lead	BSNL

Responsibilities:

- Developing RESTful client of the VMware vCloud Director using the vCloud SDK for Java; UI Design.

Environment: Java 6, vCloud 5.1 SDK for Java, JSP, HTML, CSS, Hibernate 3, Spring 3, Struts2, Microsoft SQL Server 2008 R2 Enterprise Edition, Apache Tomcat 6, RHEL 6.2 etc.

Project Description: This portal is an interface to the vCloud Director (VCD) that provides various functionalities/operations to be performed on the cloud like CRUD operations on vApps and VMs, showing details about various VCD entities like catalogs, vDCS, vApps, VMs, allocation and utilization of various resources etc.

Cloud Migration Factory	Nov-2012 to Mar-2013
Module Lead	VMware

Responsibilities:

- Coding and code review; High and low-level design.

Environment: Core Java, JSP, Servlet, JAX RS REST, MySQL, JavaScript, Ajax, jQuery, JSON, Tomcat 7, Eclipse Helios, Spring 3, Hibernate 3, TestNG, Struts 2, vSphere etc.

Project Description: This application allows to package enterprise applications into installers that can automate the deployment of the entire solution in cloud.

Factory has following two main components: i) UI and ii) Controller

There are primarily four processes as part of the factory: i) Author Package ii) Build Package iii) Prepare Package and iv) Deploy Package.

Standard F&A Journal Entries	Jun-2011 to Oct-2012
Module Lead	Uni-Lever UK

Responsibilities:

- Process apps design using IBM BPM Process Designer; Team management and client interaction; Coding and code review; Release of process app on production.

Environment: Business Process Management 7.5/7.5.1(BPM), Core Java, JSP, Web Services, SOAP, JavaScript, DB2 9.7 etc.

Project Description: Goal of Standard F&A Journal Entries is to manage the business transaction and decide the different approval level based on JET Document. Journal Entries is the statement of business transactions information used in the accounting system that shows an explanation of each transaction, the accounts affected, amount and much more.

Vender Master Maintenance	Nov-2010 to Jun-2011
Module Lead	British Petroleum (BP)

Responsibilities:

- WLE 7.2(Installation and configuration of Process Center and Process Server, apply fixes, Process Apps design, testing of Process Apps etc.); Deploy Process App to production, staging and test environment; Client interaction and team management etc.

Environment: IBM Web Sphere Lombardi Edition 7.2 (WLE 7.2), Business Process Management 7.5 (BPM 7.5), Core Java, JSP, SOAP, WAS, JavaScript, DB2 9.7, Web Service etc.

Project Description: Vender Master Maintenance is full process form and workflow for submission, validation (e.g. duplicate check), confirmation, approval and completion of British Petroleum Vender's as for Marine Fuels UK (GB15), Air UK (GB4J), and Air BP Central (GB08).

Wireless Permission Service and URMS	Jan-2010 to Nov-2010
Senior Software Engineer	TELUS, Canada

Responsibilities:

- Coding and code review; Deployment on stage server and Integration Testing; Team handling etc.

Environment: Oracle Web Logic 10gR3, Core Java, Oracle 10g, Web Services, SOAP etc.

Project Description: The goal of the service is to allow user permissions to be managed based on business roles and allow applications to enforce fine grained permissions based on the application functions returned as a result of the assigned business roles map to. This interface is defined to be generic and applicable to any type of user, business role, and business object. Specific instances of the service will only support users from a specific Identity system, and only business roles and objects that have been configured in that instance.

UNIFY Service Management Platform (USMP), Multi Service Gateway (MSG), Bridge Development	Oct-2008 to Jan-2010
Senior Software Engineer	Airtel, Tikona, Spectra, IDC

Responsibilities:

- Analysis, coding, code review and unit testing.
- Adding new feature and client specific feature in product.
- Client handling and team mentoring.
- OSS/BSS Lead.

Environment: Core Java, JSP, Servlet, Struts 1.2, Custom and Display tag library, JDBC, Ibatis, hsql, PostgreSQL, Ajax, Tomcat 5.5, Eclipse 3.2, Linux, Subversion, SMTP, SMPP, Unix cron jobs, Shell Script, JRadius, Quartz Scheduler, Provisioning, Oracle 10 XE etc.

Project Description: The **UNIFY (Subscriber and Service Management Suite) SMP** is a carrier-grade OSS/BSS platform for broadband service providers. Using this advanced software platform, service providers can acquire, provision, bill and manage their subscribers, services and networks. Deployments of the UNIFY SMP can be found in DSL, Public Wi-Fi, WiMAX, Metro Ethernet, FTTH and Satellite (VSAT) where everything from the subscriber sign-up to real-time pre-paid service billing is handled by this single platform. For rapid network deployment, the UNIFY SMP readily interfaces with leading Service Delivery Routers (SDR), Broadband RAS (B-RAS), Subscriber Gateways, VoIP and IPTV Equipment over AAA and Web Services.

MSG (Hotspot Gateway) Enterprise Edition bundles and collapses entire networking closet (or rack) into a single, intelligent, intuitive network appliance. More significantly, the MSG enables an identity centric, profile-based network infrastructure that adapts network behavior and resources based on user identities. Use as subscriber gateway & network access controller for WiFi, WiMAX& other networks. Provides authentication, bandwidth management, subscriber billing (RADIUS), PPPoE, DHCP, DNS, load-balancing, security & more. MSG ISP-in-a-box can replace less powerful hotspot controllers & UTMs. Use as network gateway for controlling Internet access for each user. Authenticate, monitor & control every session including differential QoS, monthly quotas & personal content filters. Enable free & paid Guest Internet access across properties. Interface with PMS & other IT systems.

Bridge Development project provide Wi-Fi billing in hotel. This project interacts between IDS Hotel Management System and Inventum Broadband Management Gateway.

Mobile Group Messaging Service (MahaSMS)	Oct-2007 to Oct-2008
Software Engineer	TBM Technologies

Responsibilities: Involved in analysis, design and database design; Coding and code review; Testing; Simulating MSSC; Radius billing testing with Oxicash; Team handling.

Environment: Core Java 5, JSP, Servlet, Struts1.2, Oracle 10g Ex, NetBeans 6, Linux 9, JBoss 4.0.5, Kannel, Logica SMPP Protocol API, JSMPP API, Tiny RADIUS API (AAA, Billing), Log4j, WML etc.

Project Description: The main function of this application is to provide the world's first peer to peer multimodal group messaging service for mobile phone users. A subscriber can manage his account using **Mobile** or **Web** or **WAP** Enabled Devices and send messages among group.

Emergency Alert Notification (Hamara Sahara)	Oct-2007 to Oct-2008
Software Engineer	TBM Technologies

Responsibilities: Involved in analysis; Design (UI, Database Design and Tuning etc.); Coding; Testing and trial with BSNL in different region in India etc.

Environment: Core Java (Multithreading, Regex), JSP, Servlet, Struts, Oracle 10g Ex, NetBeans 6, Linux, JBoss 4.5, Log4j, C Language, SS7(ISUP, IAM etc.), Kannel, Socket Programming etc.

Project Description: Emergency Alert Notification Service is a SMS based service that sends Emergency Alert Notification Message among registered subscriber group members when subscriber call Emergency Number (Police: 100; Fire: 101; Ambulance: 102 etc). Project base on SS7 signaling.

Central Electricity Authority IMS	July-2007 to Oct-2007
Software Engineer	CEA, MOP, Govt. of India

Responsibilities: Involved in analysis and implementation; UI and DB design and coding etc.

Environment: Core Java, JSP, Servlet, Struts 1.2, Oracle 10g, eclipse, Tomcat 5.5 etc.

Project Description: The objective of developing an IMS is to enable information sharing between various stakeholders in the power sector and archive the information for later use. The system should have adequate safety and security features. Information so collected shall be used in report generation and analysis. Central Electricity Authority IMS provides the generating stations, transmission and distribution utilities etc. a medium to easily provide information to CEA electronically preferably over the Internet. The system shall help to disseminate this information after processing through publishing and the CEA's Website.

Cover Index Generation	Sep-2005 to Jul-2007
Programmer	DK publication

Responsibilities: Coding, Index generation, pagination and page generation for various purpose.

Environment: Windows XP, Linux, Mac OS, Adobe InDesign, Core Java, Swing, SAX, DOM, XSLT, XML (DTD, Schema), iText, HTML etc.

Project Description: This project deals with auto generation of Cover Index. The user interface for this project has been designed using Swings. As soon as the user browse and loads the XML order related to various issues of a publication, it loads all the corresponding XML files in memory and finally extracts all the required information using SAX, DOM, XSLT and then arranges all these information according to the style in the database and generates three types of indexes (Content Index, Author Index and Subject Index) and make PDF and zip file using Java API, upload it to the server and sends mails using Mail API to the concerned person.

Journal and Book Info System	Jul-04 to Aug-05
Programmer	Researchco Reprints

Responsibilities: Coding and Database Design.

Environment: VB 6, Oracle 8i, Crystal Reports, Oracle PL/SQL 8i.

Project Description: The system will strive to automate existing processes whereby information and updates from the customer regarding various information such as information about new journals and books, modification about current journals etc. is readily available to all users at any time.

Certificate

- Oracle Certified Professional: Java SE 8 Developer
- AWS Certified Solutions Architect - Associate
- Automation Engineer Practitioner Certification (Machine Learning using Python)

Personal Details

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