

**ASHOO OBEROI** | ashoooberoi@gmail.com | (301)580-3956 | Washington, D.C.

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**SUMMARY:**

Principal Engineer, Technical Lead, and Solution Architect with extensive experience in software development, enterprise application integration, data architecture, and analytics. Expert across all phases of the SDLC, delivering scalable solutions for business applications, big data platforms, and real-time systems. Proven track record in leading cross-functional teams and driving innovation to meet business goals. Provided technical solutions to Senior Management for decision making. Extensive experience and expertise in FDA drug, label approval, and adverse event applications.

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**EDUCATION:**

**Bachelor's in Computer Science Engineering**

University of Pune, India.

**Clearance:**

**Public Trust, Secret**

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**TECHNICAL SKILLS:**

Programming Languages	Java, Python, Pandas, Numpy, Matplotlib, Seaborn, PL SQL, C, C++,
Frameworks	Struts, Spring Framework, Hibernate, Spring Security, Spring Boot, J2EE, Web Service(SOAP), REST API, AJAX, JSP, Spring MVC, Tag Library, JMS, Hadoop, CI/CD
Web Technologies	Angular, jQuery, Bootstrap, JSON, JavaScript, Typescript, HTML5, CSS
Application Servers	JBoss 7.x, Apache Tomcat 9.x, WebLogic, Websphere, Appian, PVWorks
Databases	Oracle, MySQL, HBase, DB2, MongoDB, PostgreSQL, AWS Aurora MySQL, AWS Open Search
Networks	Cloudera, Firewall Rules(F5)
Tools	JIRA, Appian, PVWorks, Rational Rose, Mockito, Junit
Source control	Github, BitBucket, Subversion
Cloud	AWS, EC2, S3, ELB, Aurora MySQL, Lambda, Route 53, IAM, CloudFront
DevOps Tools	Maven, Gradle, JUnit, Selenium, Jenkins, Ant, Nesux, Kubernetes, Docker
Operating System	Linux, Windows, macOS

References will be available on request.

## PROFESSIONAL EXPERIENCE:

### ❖ Food and Drug Administration, Derwood, MD

*IT Specialist / System Analyst/ Tech Lead, June 2016 – Present*

#### **Project: Corporate Database Portal, FDA**

- Led and mentored a cross-functional team of 20 developers and 5 testers for a 600+ user base, overseeing the prioritization of user story requirements, technical analysis, design, development, code reviews, and deployment/implementation of complex technical solutions using DevOps and Agile
- Designed and developed a monolithic app (CDP) to a microservices architecture using Spring Framework, Python, and Angular 11+
- Designed and led a team to deploy the applications to a scalable, secure, and resilient microservices architecture on AWS Cloud for modernization using EC2, VPC, Route 53,
- Provided technical recommendations to a 30-member contractor team on integrating external components affected by design changes in Development Modernization and Enhancement (DME) projects.
- Draft recommendations and write-ups for contract extensions related to DME projects.
- Advised the Contracting Officer Representative and Senior Management team on technical solutions, providing LOE estimates and creating detailed project plans to support decision-making for releases and moratoriums.
- Assisted in integrating Appian software and PVWorks with REST APIs
- Collaborate with External Operation and Maintenance teams to develop technical solutions for Change Requests (CRs) and Operational issues.
- Work closely with Drug Review and the Document Control Upload teams to resolve business and Industry-related challenges.
- Developed applications using the Pair programming Technique.
- Lead the technical team in several technology upgrades: Java 8 to Java 11, Spring Boot 1.x to Spring Boot 2.x, AngularJS to Angular 11+, Gradle 4.x to 5+, Operating System EOL Upgrades, Security-related Upgrades.
- Analyze and implement Network(F5 and AWS Security) and Firewall rules to support deployment and system security.
- Draft recommendations and write-ups for contract extensions related to DME projects.
- Support the annual upgrades of VeDDRA in Informatica for CVM applications to support the Industry.
- Create and manage Virtual IPs across multiple environments to support development, migration, and deployment.
- Implemented a serverless architecture for a highly available REST API to retrieve JSON files stored in AWS S3 using API Gateway, Lambda, and CloudFront.
- Designed and implemented a data pipeline using Python to extract data from Oracle, transform it into JSON format, and load it into MongoDB; optimized data flow and format for scalable storage and efficient querying
- Researching a solution to extract keywords and summaries from drug review PDFs using OpenAI and store them in OpenSearch/MongoDB Atlas for free-text and semantic search.

**Environment:** Python, Jupyter Notebooks,HTML5, CSS3, Java 8, Spring boot 2.x, Spring JPA, Spring AOP, Hibernate ORM 4.3.5, Agile/Scrum, Oracle 19c, Log4j, Twitter Bootstrap 3.x, JUnit, Atlassian JIRA, Bitbucket/Git, Angular 4+, RESTful Web services, AWS, EC2, VPC, IAM, S3, CloudFront, Route53, Lambda, API Gateway. Swagger UI, Nexus, NPM, Gradle, MySQL, Aurora, OpenSearch, MongoDB Atlas

❖ **SAIC & Salient CRGT | Food and Drug Administration, Reston, VA**

*Principal Software Engineer, June 2018 – April 2020*

**Project: CITPOMS, FDA**

- Led a team of 30 developers and database administrators in supporting FDA CVM initiatives.
- Provide technical guidance and programmatic support to CVM's senior leadership and management across CITPOMS programs, R&D efforts, system upgrades, and other initiatives.
- Serve as a Subject Matter Expert (SME), delivering technical and architectural solutions while fostering collaboration among FDA stakeholders and team members.
- Support all CVM applications across production and lower environments, ensuring system stability and operational efficiency.
- Collaborated with customers, analysts, architects, DBAs, operations, and testers using Agile Scrum

**Project: US Patent and Trademark Office (USPTO), FDA**

- Re-architected a legacy multi-page web application into a microservices-based architecture using Spring Boot for RESTful APIs and Angular for a modern single-page frontend.

**Environment:** HTML5, CSS3, Apache Tiles, JSTL, JDK 1.8, J2EE, Javascript, JQuery 1.8, AJAX, Struts 2.0, Spring MVC 3.0, Hibernate 3.x, PL/SQL, Tomcat 8.x, Log4J, Oracle 12c, Twitter Bootstrap 3.x, JUnit, SonarQube, Atlassian JIRA, Stash/Git, Spring JDBC template, AngularJS, SCRUM, JUnit, Web services(SOAP and REST)

❖ **Lockheed Martin| SSA, Baltimore, MD**

*Principal Software Engineer, Nov 2004 – April 2016*

**Project: Public Facing Integrity Review (PFIR), SSA**

- Designed the architecture for PFIR's web, web services, batch, and reporting processes.
- Captured 400 million data records from the SSA transactions in the public-facing applications, stored them in HBase, and used Hadoop MapReduce and JPMML to mine the data and generate analytic reports to reduce the performance of the search from 500 hours to 6 minutes
- As part of the tiger team, solved problem reports (PRs) in the order of their priority in iterations.
- Developed project object model files for Maven and implemented continuous integration by setting up Hudson to perform the build. Worked with system owners to install software releases on Linux servers. Developed reports using iReports and deployed them on JasperReports Server.

**Project: Metropolitan Transportation Authority (MTA) of New York City and U.S. Customs and Border Protection (CBP), SBInet**

- Worked with the MTA police's IT department to gather the RMS. Worked with COTS product vendors (Intergraph) to install and understand the products' architecture.
- Performed architectural and functional evaluation of Advanced Targeting COTS tools. Analyzed CBP's screening and targeting requirements and created use cases, classes, and sequence diagrams.

❖ **Client Network Services, Inc.| State of Maine, Rockville, MD**

*Software Engineer, Nov 1999 – Jan 2004*