**Prakash Ojha**[ojhaprakash@gmail.com](mailto:ojhaprakash@gmail.com)

Linkedin: [linkedin.com/in/prakash-ojha-2192ab29](https://www.linkedin.com/in/prakash-ojha-2192ab29)

(571) 295-4355

* Distinguished Software Architect with 19 years of progressive experience in architecting and leading development of enterprise-scale applications across financial services, digital media, and retail sectors, specializing in high-performance distributed systems.
* Demonstrated expertise in architectural transformation, successfully leading multiple organizations through legacy modernization initiatives, including migration from monolithic to microservices architectures utilizing Spring Cloud, Netflix OSS stack, and cloud-native technologies.
* Extensive experience in designing high-frequency trading platforms and real-time financial systems using reactive programming patterns with Spring WebFlux, achieving sub-millisecond latency and processing millions of transactions daily.
* Deep expertise in event-driven architectures and stream processing, implementing solutions using Apache Kafka, Kafka Streams, and RabbitMQ for real-time market data processing, trade execution, and marketing automation workflows.
* Proven track record in designing fault-tolerant distributed systems using modern cloud-native technologies, including Kubernetes orchestration, Docker containerization, and AWS services (EKS, EC2, Lambda, CloudWatch).
* Strong background in implementing complex database architectures, including design and optimization of Oracle RAC clusters, PostgreSQL high-availability setups, and Cassandra distributed databases for petabyte-scale data management.
* Expertise in developing responsive frontend architectures using Angular (2-14), implementing advanced state management patterns with NgRx/Redux, and establishing scalable component design systems for enterprise applications.
* Demonstrated success in building real-time analytics platforms using the ELK stack, implementing custom dashboards with D3.js and Highcharts, and developing data visualization solutions for complex financial data.
* Extensive experience in establishing enterprise-wide security architectures, implementing OAuth2/OIDC with Keycloak, designing API gateway patterns, and ensuring regulatory compliance (SOX, GDPR, PCI-DSS).
* Strong track record in designing observability solutions using Prometheus, Grafana, and OpenTelemetry, establishing comprehensive monitoring and alerting systems for mission-critical applications.
* Proven expertise in implementing automated testing strategies, including unit testing (JUnit 5, TestContainers), integration testing (Cypress, Selenium), and performance testing (JMeter, Gatling) frameworks.
* Demonstrated success in establishing robust CI/CD pipelines using GitLab CI and Jenkins, implementing GitOps practices, and managing infrastructure as code using Terraform and AWS CloudFormation.
* Expert in optimizing application performance, implementing caching strategies with Redis clusters, and designing distributed data architectures for high-throughput systems.
* Strong background in designing batch processing systems using Spring Batch, implementing ETL pipelines, and managing large-scale data migration projects.
* Extensive experience in implementing message-driven architectures, designing pub/sub systems, and developing event sourcing patterns using Axon Framework.
* Proven leadership in managing and mentoring teams of 15-25 engineers, establishing technical governance frameworks, and driving adoption of best practices across development organizations.
* Track record of successful collaboration with business stakeholders, translating complex business requirements into scalable technical solutions, and driving technology strategy alignment with business objectives.
* Expertise in establishing development standards, implementing code review processes, and maintaining high-quality codebases through static analysis tools and automated quality gates.
* Strong background in capacity planning, performance optimization, and scalability design for enterprise systems handling millions of daily transactions.
* Demonstrated success in vendor evaluation, technology selection, and managing technical relationships with third-party providers and system integrators.

**SKILLS**

|  |  |
| --- | --- |
| **Category** | **Skills** |
| **Programming Languages** | Java (1.4 through 17 ), Python, JavaScript, TypeScript |
| **Frameworks & Libraries** | Spring, Spring Boot, Spring Cloud Gateway, Spring Security, Spring WebFlux, Spring Batch, Netflix OSS, Angular, Hibernate, Express.js |
| **Data Storage & Processing** | Oracle, MySQL, PostgreSQL, Cassandra, MongoDB, Redis, Memcached, EhCache, Elasticsearch, Apache Solr, Kafka, RabbitMQ, ActiveMQ, JMS |
| **Web Technologies** | HTML5, CSS3, jQuery, Bootstrap, Redux, NgRx, D3.js, Highcharts, REST, SOAP, WebSocket |
| **DevOps & Infrastructure** | Docker, Kubernetes, Jenkins, Gitlab CI, AWS EKS, EC2, Terraform |
| **Monitoring & Observability** | Prometheus, Grafana, ELS Stack, Log4j, Jaeger, OpenTelemetry |
| **Testing Tools** | JUnit, TestNG, Selenium, Cypress, Mockito, JMeter |
| **Security & Identity** | OAuth2, OIDC, JAAS, JWT, Keycloak, Spring Security |
| **Build & Deployment** | Ant, Maven, SVN, Git, JBoss, WebLogic |
| **Development & Documentation** | Intellij IDEA, Eclipse, Swagger/OpenAPI |

**BNY Mellon | Software Architect/Software Engineering Lead**

**Pittsburgh, United States  
Feb 2020 – Present**

**Project Description**BNY Mellon is a global investment company managing over $40 trillion in assets. Led the architecture and development of global tax processing and market data systems serving major institutional clients.

* Architected comprehensive transformation of global tax processing systems serving 40+ markets, transitioning from monolithic applications to cloud-native microservices architecture, resulting in 70% improvement in processing efficiency
* Led technical vision and implementation of real-time market data processing platform handling millions of daily transactions, establishing patterns for event-driven architecture across enterprise
* Facilitated sprint planning, daily stand-ups, and retrospectives, improving team alignment and project delivery pace
* Established cloud-native architectural principles and event-driven design patterns adopted enterprise-wide, improving system reliability and maintainability while reducing operational costs
* Designed distributed microservices architecture for Relief at Source (RAS) platform using domain-driven design, implementing bounded contexts and event-sourcing patterns for complex tax processing workflows
* Streamlined stakeholder communication, aligning technical decisions with business objectives, reducing project risks and delays.
* Created resilient event-sourcing architecture using Axon Framework and Kafka Streams, enabling real-time tax processing and market data integration with exactly-once delivery guarantees
* Implemented reactive processing architecture using Spring WebFlux and Project Reactor, achieving sub-millisecond latency for high-throughput market operations
* Established comprehensive service mesh architecture using Istio, enabling advanced traffic management, security policies, and observability across microservices
* Established enterprise-wide architecture review board governing technical decisions across 20+ development teams, implementing standardized patterns for microservices development and cloud deployment
* Created detailed technical documentation and architecture decision records (ADRs), ensuring knowledge sharing and consistent implementation across teams
* Led and mentored team of 25 engineers across multiple agile squads using Spotify model, establishing technical excellence and fostering innovation culture
* Collaborated with global stakeholders to align technical solutions with complex regulatory requirements and business objectives
* Developed scalable microservices using Spring Boot 3.x with domain-driven design principles, implementing CQRS and event sourcing patterns for complex business workflows
* Architected API gateway solutions using Spring Cloud Gateway, implementing rate limiting, circuit breaking, and request transformation
* Created resilient distributed systems using Spring Cloud Circuit Breaker with Resilience4j, implementing fallback mechanisms and bulkhead patterns
* Implemented centralized configuration management using Spring Cloud Config with Git backend, enabling dynamic configuration updates
* Established OAuth2/OIDC authentication using Spring Security with Keycloak integration, ensuring enterprise-wide security standards
* Developed reactive microservices using Spring WebFlux with Project Reactor, delivering scalable performance, high throughput, and minimal latency.
* Implemented service discovery and client-side load balancing using Netflix Eureka and Ribbon ensuring seamless scalability and improved fault tolerance.
* Created comprehensive distributed tracing using Spring Cloud Sleuth and Zipkin enabling detailed request tracking and faster issue diagnosis.
* Utilized advanced Java 17 features including records, sealed classes, and pattern matching for enhanced type safety and code clarity
* Implemented reactive programming patterns using CompletableFuture and custom Thread Pool Executor configurations enhancing concurrency and maximizing resource efficiency
* Designed fluent APIs for business logic implementation using functional programming concepts simplifying code readability and reducing boilerplate code
* Designed multi-region Kubernetes deployment on AWS EKS using GitOps methodology with ArgoCD enabling automated rollouts, consistency, and disaster recovery
* Implemented auto-scaling strategies using custom metrics with Horizontal Pod Autoscaling
* Established comprehensive AWS security controls adhering to financial industry compliance requirements ensuring robust data protection and meeting regulatory standards
* Architected event-driven systems using Kafka Streams for real-time market data processing achieving low-latency insights and scalable data pipelines
* Implemented exactly-once processing semantics with custom error handling and dead letter queues ensuring reliable message delivery and fault tolerance
* Created multi-cluster replication strategies ensuring data consistency across regions enhancing disaster recovery and reducing data discrepancies
* Designed time-series data architecture using Cassandra for market data management, implementing custom partitioning strategies and consistency models for optimal performance
* Created PostgreSQL high-availability setup with read replicas and partitioning schemes for transactional data boosting reliability, load distribution, and query performance.
* Implemented hybrid data storage combining MongoDB for flexible schema requirements and Oracle RAC for critical financial transactions
* Established contract testing using Spring Cloud Contract ensuring reliable microservice communications and preventing integration issues during API changes
* Developed comprehensive testing pyramid including unit tests (JUnit 5), integration tests (TestContainers), and end-to-end tests (Cypress)
* Led migration from AngularJS to Angular 14, implementing micro-frontend architecture using Module Federation improving modularity, scalability, and application maintainability
* Established state management patterns using NgRx with custom effects and selectors for complex data flows streamlining state handling and enhancing data consistency
* Created reusable component library adopted across multiple enterprise applications standardizing UI elements and speeding up development.
* Implemented React-based micro-frontends integrating with Angular applications using single-spa enabling seamless interoperability and modular code reuse
* Developed shared component library using React with TypeScript and styled-components improving type safety and consistent styling across projects
* Established Spotify model for agile delivery, organizing teams into squads, tribes, and chapters
* Utilized JIRA and Confluence to manage user stories, track sprints, and document development processes improving project transparency and team collaboration
* Created security-first development practices including automated security scanning in CI/CD
* Implemented distributed caching strategy using Redis Cluster reducing database load by implementing write-through and cache-aside pattern
* Established performance testing frameworks using Gatling for load testing and performance verification identifying bottlenecks and optimizing system scalability.
* Implemented machine learning models for market anomaly detection using TensorFlow enhancing predictive analysis and reducing detection time.
* Created real-time analytics platform combining Kafka Streams and Elasticsearch enabling fast data processing and insightful visualization

**Environment**:  
Java 11/17, Spring Boot 2.x/3.x, Spring Cloud, Spring WebFlux, Angular 11-14, React 18, TypeScript, R2DBC, Kafka, RabbitMQ, Redis, Cassandra, PostgreSQL, Kubernetes, Docker, AWS EKS, EC2, Lambda, S3, GitLab CI, Terraform, TensorFlow, Prometheus, Grafana, Jaeger, Elasticsearch, Kibana, Keycloak, OAuth2/OIDC, JUnit 5, Gatling, TestContainers, Cypress, Axon Framework, Resilience4j, Apache Iceberg, Snowflake, Hyperledger Fabric, OpenTelemetry

**Crosscap Media Services | Lead Software Engineer/Technical Architect  
Toronto, Canada**  
August 2014 - January 2020

**Project Description**Crosscap Media Services provides enterprise marketing automation and media planning solutions for global retail clients. Led architecture and development of enterprise Market Planning Calendar platform serving major retailers (Walmart, Banana Republic, Kroger), enabling comprehensive campaign management and marketing operations with $1B+ annual marketing spend.

* Spearheaded decomposition of monolithic marketing platform into 15+ microservices using DDD tactical patterns (aggregates, entities, value objects) with Spring Boot 2.x
* Implemented event-driven architecture using RabbitMQ with custom exchange topology, dead-letter queues, and retry policies achieving 99.99% message delivery
* Designed CQRS pattern with event sourcing using Axon Framework for marketing workflows, enabling complete audit trails and temporal queries
* Created scalable data mesh architecture with domain-oriented data ownership, implementing custom PostgreSQL partitioning strategies
* Architected multi-tenant data isolation using row-level security, schema-per-tenant, and custom Hibernate filters with tenant context propagation
* Implemented distributed locking using Redisson for concurrent calendar operations with pessimistic and optimistic locking strategies to ensure data consistency and reliability
* Designed distributed caching architecture using Redis Cluster with cache-aside and write-through patterns, improving response time and reducing database load
* Implemented custom connection pooling mechanism using HikariCP with adaptive sizing and metrics enhanced monitoring, and collection via Micrometer
* Created advanced PostgreSQL optimization using parallel queries, materialized views, and custom GiST indexes, data partitioning, and faster query processing for hierarchical data
* Developed custom Hibernate second-level cache implementation with Redis backing for efficient distributed caching and improved data retrieval
* Managed Agile ceremonies, including backlog grooming and sprint reviews, improving feature prioritization and client satisfaction
* Led the transition to React hooks, optimizing component reusability and reducing boilerplate code.
* Implemented reactive processing using Project Reactor for non-blocking operations with backpressure handling, enhanced performance, scalability, and efficient resource utilization.
* Designed custom thread pool executors for CPU and I/O bound tasks with adaptive queue sizing
* Architected Solr Cloud deployment with custom analyzers, tokenizers, and dynamic fields for retail taxonomy, improving search relevance and indexing efficiency
* Implemented near real-time search using SolrCloud with custom UpdateRequestProcessors and QueryResponseWriters, advanced filtering and result caching
* Created content processing pipeline using Apache Tika with custom parsers for retail-specific formats
* Developed distributed search architecture with cross-datacenter replication and failover
* Implemented faceted search with custom FacetComponent and dynamic pivot faceting
* Designed custom scoring functions using Solr function queries for personalized search results
* Implemented Scrum practices, including sprint reviews and backlog grooming, to ensure efficient delivery of features
* Collaborated with product owners and stakeholders during sprint reviews to align project progress with business objectives
* Implemented OAuth2 authorization server using Spring Authorization Server with custom grant types, token revocation and improved security policies.
* Created hierarchical RBAC system using Spring Security ACLs with custom permission evaluators allowing granular access control and enhanced security policies
* Developed audit logging system using AspectJ with custom pointcuts and advice for compliance ensuring detailed logging and traceability of sensitive operations
* Implemented custom security filters for JWT validation with public key rotation providing robust token security and mitigating key compromise risks
* Created tenant-aware security context propagation across async boundaries maintaining consistent access control in multi-tenant applications.
* Designed an event schema registry using Apache Avro with backward compatibility validation simplifying data evolution and reducing integration issues.
* Implemented change data capture (CDC) using Debezium for real-time data synchronization enabling low-latency updates and efficient data consistency
* Created custom ETL framework using Spring Batch with partitioned step execution optimizing batch processing for large-scale data transformation tasks
* Developed idempotent message processors with custom deduplication strategies ensuring reliable delivery and data consistency across services
* Implemented saga pattern for distributed transactions using choreography handling complex workflows and failure recovery mechanisms
* Developed React components using functional programming with hooks, improving reusability and code efficiency
* Created real-time analytics pipeline using Kafka Streams with custom processors providing low-latency processing and actionable insights
* Architected multi-region deployment using AWS with active-active configuration
* Designed AWS infrastructure using EKS, RDS with read replicas, ElastiCache for Redis clusters, and custom VPC configurations for multi-region deployment
* Implemented GitOps workflow using ArgoCD with custom health checks and rollback strategies
* Created custom Kubernetes operators for application-specific orchestration
* Designed blue-green deployment strategy with automated canary analysis reducing risk and enabling seamless, zero-downtime releases for critical applications
* Implemented infrastructure as code using Terraform with custom providers improving consistency and reducing manual configuration errors
* Developed custom monitoring solutions using Prometheus with alerting rules establishing proactive incident response and enhancing system observability and reliability.
* Led team of 15 senior engineers across 3 locations, implementing Spotify model fostering agile collaboration, improving delivery speed and enhancing team cohesion
* Established architecture review board and technical governance processes ensuring adherence to best practices, reducing technical debt, and standardizing design patterns
* Created technical roadmap aligning with $50M digital transformation initiative driving strategic goals, prioritizing key projects, and optimizing resource allocation for maximum impact
* Mentored team in DDD, event sourcing, and reactive programming patterns building strong technical competencies, improving code quality, and streamlining complex business logic
* Implemented SRE practices reducing MTTR from hours to minutes improving incident response, enhancing system uptime, and increasing operational efficiency
* Created architecture decision records (ADRs) for systematic decision-making documenting key architectural choices, ensuring traceability, and facilitating knowledge sharing.

**Environment**:  
Java 8, Spring Framework 4.x, Spring Boot 1.x/2.x, AngularJS 1.5/1.6, Angular 2/4, Bootstrap 3, LESS, D3.js, Highcharts, PostgreSQL 9.x, Redis, Elasticsearch 2.x/5.x, RabbitMQ, Jenkins, Maven, Docker, JUnit 4, Mockito, Selenium WebDriver, JWT, OAuth2, REST APIs, WebSocket, STOMP, ELK Stack, JasperReports, ExcelJS, Netflix OSS (Eureka, Ribbon, Hystrix), Git

**TC Transcontinental | Lead Software Engineer**

**Toronto, Canada**April 2008 - July 2014

**Project Description**TC Transcontinental is Canada's largest printer and a leader in flexible packaging and publishing, specializing in digital publishing and commercial printing solutions for major retailers like Canadian Tire and Loblaw.Led development and architecture of enterprise Digital Asset Management (DAM) and Campaign Information Management (CIM) platforms serving major Canadian retailers. Managed multiple development teams and established technical direction for business-critical publishing systems processing millions of digital assets monthly.

* Architected enterprise Java applications using Spring Framework 2.5/3.x, implementing comprehensive IoC patterns with XML and annotation-based configurations, custom bean post processors, and aspect-oriented programming for cross-cutting concerns
* Designed scalable backend architecture using Java EE patterns in WebLogic 10.x/11.x, implementing clustering with session replication and custom deployment descriptors for high availability
* Implemented robust data access layer using Hibernate 3.x with custom user types, interceptors, and second-level caching strategies for optimized database operations
* Created modular service layer implementing declarative transaction management using Spring AOP, with custom propagation behaviors and isolation levels for data integrity
* Developed RESTful service architecture using Spring MVC with custom message converters, exception handlers, and content negotiation strategies
* Implemented message-driven architecture using JMS and ActiveMQ, creating custom connection factories and message listeners with error handling and dead letter queues
* Designed Oracle RAC database architecture implementing partitioning schemes, materialized views, and custom tablespace management for optimized data storage and retrieval
* Implemented distributed caching solution using EhCache with custom cache regions, eviction policies, and synchronization protocols across cluster nodes
* Created enterprise service bus using Apache Camel, developing custom processors, error handlers, and routing strategies for system integration achieving seamless interoperability across distributed services
* Facilitated sprint retrospectives and backlog prioritization, enhancing team productivity and delivery pace
* Used Scrum methodologies to drive iterative development, improving project visibility and timely delivery
* Developed high-performance batch processing framework using Spring Batch with partitioned step execution and custom item processors ensuring scalability and efficient resource utilization
* Implemented advanced connection pooling using C3P0, with statement caching and custom metrics collection for performance monitoring improving database efficiency and application throughput.
* Created comprehensive monitoring system using JMX with custom MBeans for real-time system statistics and health checks enabling proactive maintenance and rapid issue resolution
* Developed content repository implementation using Apache JackRabbit with custom node types, versioning support, and access control lists for fine-grained permissions
* Implemented complex workflow engine using jBPM with custom task handlers, process definitions, and human task management for approval workflows
* Created advanced search functionality using Apache Solr with custom analyzers, tokenizers, and field types for specialized content indexing boosting search accuracy and enhancing query performance.
* Developed sophisticated media processing pipeline using JAI and ImageMagick, implementing custom operations for image transformation and optimization
* Implemented document processing system using Apache POI and iText, with custom converters for various document formats facilitating efficient parsing, transformation, and format compatibility
* Created high-performance PDF generation system using Apache FOP with custom XSL-FO templates and rendering optimizations achieving faster processing and high-quality document output.
* Led and mentored team of 12 developers across multiple projects, implementing code review processes and architectural governance ensuring quality, consistency, and best practices
* Managed Agile ceremonies, including sprint retrospectives and backlog prioritization, enhancing team collaboration, productivity, and overall project efficiency
* Implemented JMS for messaging and Apache Camel for system integration, prior to Kafka adoption
* Used Scrum methodologies to drive iterative development, improving project visibility, tracking progress, and reducing bottlenecks for timely feature delivery
* Established comprehensive coding standards and best practices, including custom checkstyle rules and SonarQube quality gates reinforcing code consistency, maintainability, and early defect detection
* Created architectural decision records (ADRs) for systematic technical decision-making and documentation promoting consistent design practices and enhancing team-wide knowledge sharing
* Implemented performance testing methodology using JMeter with custom test plans and analysis reports identifying bottlenecks, optimizing application throughput, and enhancing system stability
* Developed disaster recovery procedures with defined RPO/RTO objectives and failover strategies
* Managed vendor relationships and third-party integrations with major retail systems

**Environment**:  
Java 6, Spring 2.5/3.x, Hibernate 3.x, Struts 2.x, JSP, Servlets, jQuery 1.x, HTML4/5, CSS2/3, SOAP, REST, JMS, Apache Camel, Oracle 10g/11g, WebLogic 10.x/11.x, Ant, Maven 2, Subversion, Hudson/Jenkins, JUnit 4.x, TestNG, JMeter, Log4j, Quartz, JasperReports, Apache POI, J2EE 5/6, JPA 1.0, JSF 1.2, Apache JackRabbit, jBPM 4, Apache FOP, Apache Solr 3.x, EhCache, ActiveMQ

**Consult Pro Inc. | Lead Software Engineer**

**Toronto, Canada  
July 2005 – March 2008**

**Project Description**Led the development of enterprise HRMS platform serving financial institutions across North America, focusing on core HR operations, payroll processing, and employee management.

* Architected and developed core HRMS modules (Employee Management, Payroll, Leave Management) using Java 1.4/5 and J2EE patterns with Struts 1.x Framework
* Designed system architecture implementing MVC pattern with custom ActionForms, ValidatorPlugins, and reusable JSP tag libraries
* Implemented database optimization using Oracle 9i with connection pooling, materialized views, and custom PL/SQL packages improving query speed and cutting down database load
* Created comprehensive security framework using JAAS with custom LoginModules and role-based access control strengthening user authentication and meeting compliance needs
* Developed SOAP web services using Apache Axis with custom handlers for third-party payroll system integration allowing smooth data exchange and easy integration
* Implemented JCA (J2EE Connector Architecture) for legacy COBOL system integration with custom adapters making it easier to connect old systems with new features
* Designed desktop interface modules using Java Swing with custom look-and-feel implementations giving users a clear and friendly experience.
* Created batch processing framework using Quartz Scheduler for automated payroll and report generation reducing manual tasks and saving time
* Implemented clustering solution using JBoss 4.2 with session replication and load balancing providing better reliability and handling more traffic
* Developed custom reporting engine using JasperReports with dynamic templates and multiple export formats offering easy-to-use and flexible reports
* Created XML processing framework using SAX/DOM parsers for efficient data exchange between systems speeding up data handling and improving system performance.
* Implemented logging system using Log4j with custom appenders and layouts making it simpler to track issues and debug, while providing detailed error logs and insights
* Designed database architecture with table partitioning and custom indexing strategies for optimization making data access faster and more efficient
* Build automation system using Ant with custom tasks and Maven for dependency management simplifying the build process and making it more reliable.
* Implemented custom ClassLoaders for plugin-based architecture supporting module extensibility enabling dynamic feature addition without impacting core functionality
* Designed on-premises infrastructure, focusing on scalability before cloud adoption
* Developed proprietary framework for data validation and error handling across applications ensuring consistent data quality and seamless error management
* Created custom caching mechanism for frequently accessed data improving system performance
* Implemented automated testing framework using JUnit with custom test runners and fixtures streamlining test execution and increasing code coverage
* Designed connection pooling using Apache DBCP with statement caching and monitoring enhancing database access speed and reducing contention
* Designed on-premises infrastructure, focusing on scalability before cloud adoption
* Created deployment automation scripts for multiple environments with configuration management simplifying releases and minimizing manual intervention
* Implemented audit logging system with custom database triggers and stored procedures providing detailed tracking for compliance and troubleshooting
* Developed custom tag libraries for standardized UI components across applications promoting reusable, consistent, and maintainable front-end code
* Created data migration frameworks for legacy system integration and data conversion ensuring accurate data transfer and minimal downtime
* Implemented session management with custom timeout handlers and security checks safeguarding user sessions and preventing unauthorized access
* Utilized JMS for messaging, ensuring reliable data exchange in pre-Kafka adoption projects
* Designed modular architecture using Service Locator and Business Delegate patterns enhancing code reusability and decoupling service dependencies
* Introduced Agile practices with daily stand-ups and bi-weekly sprints, improving team focus, delivery pace, and collaboration
* Worked with stakeholders to refine requirements during sprint planning, aligning technical efforts with business needs, reducing project risks and delays.
* Created custom exception handling framework with standardized error reporting improving error traceability and simplifying debugging efforts
* Implemented role-based menu system with dynamic permission management customizing user experiences based on access levels.
* Developed automated backup and recovery procedures for critical data ensuring data integrity and reducing potential data loss risks.

**Environment**:  
Java 1.4/5, Struts 1.x, JSP, Servlets, XML, SOAP, Apache Axis, Tomcat, Java Swing, Oracle 9i, JDBC, JUnit, Ant, Maven, JBoss 4.2, Log4j, Quartz, jasperReports, J2EE

**Education:**

**Masters in Computer Science, Georgia Institute of Technology, Georgia**

**Bachelors in Computer Science, Hope College, Michigan**

**Authorized to work in the US for any employer**