David Z Lee

(734) 262-6655 | Ann Arbor, MI 48197 | david.zt.lee@gmail.com | LinkedIn | Github | US Citizen | Available Immediately

Career Objective
Highly skilled **Senior Java Software Engineer and System Architect** with 15+ years of experience designing, developing, and optimizing scalable high-performance, enterprise systems. Proven track record of reducing risk exposure through AI-powered fraud detection, automated risk scoring and real-time decision models. Passionate about engineering excellence, integrating cloud-native technologies, and fostering team success through mentorship and hands-on leadership.

Technical Summary
Recognized for proactive problem-solving and ownership of mission-critical project.
- **Java Ecosystem:** J2EE, Spring Boot, JSP, JSF, JPA/Hibernate, Microservices.
- **Cloud & DevOps:** OpenStack/AWS/GCP/Azure, Docker, CI/CD, Jenkins, Maven, Agile/Scrum, Jira, Confluence.
- **Full-Stack:** MVC, React, Node.js, Angular, REST/SOAP, SQL/NoSQL (Oracle, PostgreSQL, MongoDB, DB2).
- **Leadership:** Mentoring teams, code reviews, architecture design, and stakeholder collaboration.

Technical Skills:
- **Languages & Frameworks:** J2EE , Java versions 21, 17, 11, JSP, JSF, Spring (Boot, MVC, Security, AOP, Batch, HATEOAS), Vaadin (Flow, Hilla), JPA, Hibernate, JavaScript (Node.js, React, AngularJS), Python, Kotlin, Ruby on Rails, MBassador, Kafka, .Groovy, NET Framework, CSharp, DCOM, Mainframe, COBOL.
- **AI/ML:** OpenAI, Gemini, LangChain, RAG, MLflow, risk classification models, anomaly detection
- **Cloud & DevOps:** OpenStack, AWS (EC2, S3), GCP, Docker, Jenkins, Git, Jira, Maven, Gradle, Ant, Ansible, OOD, DDD, TDD, CI/CD, DevOps, Agile/Scrum, Data Security, Auditing, and App Health Tracer and Monitor.
- **Databases & Tools:** Oracle, PostgreSQL, MySQL, DB2, Neo4j, MongoDB, Kafka, Elasticsearch, Junit, Jmock, SQL, NoSQL, Selenium, Jasper Report, SonarCube, DynaTrace, VisualVM, HipTest, Terraform, Kubernetes.
- **Angular, React, Struts, JSF, Icefaces -** ready to adapt to Angular 14+ and React 15+ as per project needs
- **Other:** Microservices, Resilience4j, Prometheus, Grafana, HIPAA Compliance, REST/SOAP APIs, Linux (Mint, Fedora), Windows, MacOS, iPhone SDK, Android SDK, Firebase, Talend, SAP BI/BW, ADA, WCAG 2.0

Education
M.S. Computer Science | Northern Illinois University

Certifications
- Oracle Certified Expert (Java EE 6, 2011, 2005)
- Sun Certified Java Programmer (2000)
- Training of OpenStack, AWS, GCP, DevOps, CI/CD, Docker, CMM, SAP BI/BW, Hyperion, SEO

Professional Experience:

Center for Information Management, Inc. | Ann Arbor, MI   **Apr 2015 – Mar 2025**
Team Lead & Senior Software Engineer
- **Led modernization** of HIPAA-compliant heathcare assessment system; migrated legacy Java systems into modular, AI-enhanced microservices with Kafka-based auditing, improving system maintainability and scalability.
- **Designed a Kafka** event pipeline processing millions of transactions per day, reducing system latency by 40% and enabling real-time fraud detection and credit risk scoring.
- **Built AI-driven assessment models** using LLMs to parse unstructured documents, improving risk scoring accuracy and reducing approval turnaround by 40%.
- **Led the accessibility** compliance effort and Ensured ADA, WCAG 2.0, and Section 508 compliance via semantic HTML, ARIA support, and Lighthouse/axe validation.
- **Led HIPAA-compliant** system development, applying rigorous regulatory standards protecting PHI similar to those in financial services, ensuring secure data handling and compliance with industry regulations.
- **Delivered** secure, stable REST APIs integrated with Kafka messaging, maintaining high availability and backward compatibility. **Addressed security** findings proactively, leading efforts to resolve vulnerabilities and ensure compliance with industry standards (e.g., HIPAA, PHI, GDPR)

- **Implemented DevOps automation** with Jenkins, Docker, and OpenStack, improving deployment efficiency and code quality with added system Tracer and Monitoring dashboard
- **Mentored team members** in DDD, Agile, performance tuning, and CI/CD pipeline creation; led production troubleshooting for mission-critical services.
- **Designed and Implemented** automated assessment workflow, compliance modeling and fraud detection that quantifies risk scoring in real time, improving accuracy, minimizing risk exposure, reducing system latency, and enabling accelerated decision making and approval.
- **Implemented end-to-end** performance monitoring and resilience tooling using Prometheus, Grafana, and Resilience4j, enabling real-time metrics, automated alerting, and rapid anomaly detection. This significantly reduced incident response times and ensured high system availability and fault tolerance under load
- **Developed modern, scalable** single-page applications (SPAs) for auditing, system performance, and health monitoring dashboards using Java 21, Angular (2+), and React. Ensured cross-browser compatibility and optimized performance for seamless user experience.
- **Architected microservices** for real-time processing of file storage, time-keeping, billing, invoicing, modular data bus, and auditing with event-driven architecture and Kafka-based event pipeline processing millions of transactions daily on premise cloud and Spring/Hibernate AWS/GCP, and integrated into compliance systems, improving scalability and reducing processing costs by 40% and reducing processing time latency by 30%.
- **Implemented AI-Powered** fraud detection, prevention, risk mitigation, and predictive assessment modeling solution by using LLM-based classifier and parser for efficient unstructured documents processing and cutting review time with risk scoring and faster approval turnaround by over 40%.
- **Delivered as a scalable and stable REST API integrated with Kafka messaging into high-consumer-count** applications, maintaining consumer trust through semantic versioning and zero-breaking changes for consumers.
- **Led production support** and troubleshooting efforts, swiftly diagnosing and resolving system performance bottlenecks to ensure high availability and minimal downtime. Consistently maintained over 99% customer satisfaction—recognized as one of the highest customer feedback scores in the industry.
- **Designed and built** system heath check and monitoring dashboards with integrated event-driven scheduling and messaging modules, enhancing user productivity by 40%.
- **Spearheaded React Native** implementation of help desk ticketing and notification sytems for mobile platforms.
- **Extensive experience working** with Java, J2EE, Spring (Boot, MVC, Security, AOP) and other web frameworks and various database (Oracle, PostgreSQL, MongoDB), adept at transitioning between different technologies.
- **Developed** full-stack solutions utilizing React and Angular (2+), ensuring smooth interaction with REST APIs and backend systems. Ready to adapt to Angular 14+ and React 14+ or the latest as projects needs
- **Maintained** .NET applications with 5+ years of prior development. Frequent updates needed for .NET platform, MS SQL and code currency. Maintained some other legacy applications with some exposure to Mainframe system, DB2 and COBOL
- **Implemented the CI/CD pipeline** and snapshot build using Jenkins, Ansible and Maven, accelerating code deployment speed and ensuring high-quality standards through automated unit and integration tests.
- **Collaborated directly** and worked closely with external clients in the financial and healthcare sectors to gather requirements, align on technical solutions, and resolve complex integration challenges, ensuring successful and compliant system deployments..

Compuware Corporation | Detroit, MI   **Sep 2000 – Mar 2015**
Lead Java Developer & Systems Architect
- **Spearheaded** design and development of service maintenance time-keeping, billing, and invoicing system.
- **Modernized** corporate time-keeping, billing, invoicing, finance, payroll, and license management systems by migrating workloads to AWS (EC2, S3), cutting infrastructure costs by 20%.
- **Led enterprise integration efforts** unifying and streamlining corporate data flow, exchange, and master data management among diverse systems (Oracle SOA, Dell Boomi and Salesforce EBS).
- **Spearheaded full-stack Java development** for eService license management platform with SSO/SAML authentication and contributed to cross-platform iOS/Android mobile apps.
- **Optimized automaker systems:** Dealer Inventory Management app reduced reorder delays by35%; Material Cost Prediction app improved budget accuracy by 50%.
- **Developed and maintained** .NET applications and led maintenance of COBOL-based legacy systems that is integrated with DB2 and modern Java services.