

Jeremy Odell

Solution Architect

jeremyodell@gmail.com
Fulshear, TX
(713) 306-3956

Dynamic and goal-oriented AI-focused software architect with extensive experience designing enterprise-scale solutions and leading cross-functional development teams. Proven expertise modernizing legacy applications into scalable microservices architectures while integrating cutting-edge AI capabilities that significantly enhance development efficiency. Strong track record mentoring engineering teams, implementing best practices, and delivering mission-critical software systems across complex organizational environments. Demonstrated success translating business requirements into robust technical solutions.

Areas of Expertise

Full-Stack Development · Enterprise Software Architecture · AI Integration & Implementation · Microservices Architecture · Software Development Leadership · System Design & Engineering · Technical Team Management · Application Modernization · DevOps & CI/CD Implementation · API Development & Integration · Code Quality & Standards

Programming Languages: Java · Javascript · TypeScript · Python · Go · C# · C++ · Groovy

Frameworks & Libraries: Spring Boot · Node.js · Hibernate · JPA · RESTful APIs · Angular · React · Vue.js · Material Design

Cloud & DevOps Tools: AWS · GCP · Kubernetes · Docker · CloudFormation · Serverless · CI/CD

Databases & Messaging Systems: PostgreSQL (pgvector) · MongoDB · SQL Server · Snowflake · Kafka · ActiveMQ · RabbitMQ · ETL

AI & ML Tools: Foundation Models · RAG Systems · Amazon Bedrock · SageMaker · Spring AI · Custom AI Agents · MCP Protocol · Generative AI

Architecture & Testing Tools: Microservices · Event-Driven Architecture · Clean Architecture · TOGAF · Archimate · TDD · Unit Testing · Integration Testing

Professional Experience

AI Enablement Consultant · APG&E

2025 - 2025

- Established AI governance frameworks and enterprise-wide enablement strategies ensuring secure data utilization across complex organizational environments. Produced conceptual and physical architecture diagrams using ArchiMate and UML methodologies while designing scalable AI integration solutions. Mentored development teams on advanced AI tool integration while establishing best practices for enterprise-wide adoption. Documented technical integration patterns supporting long-term organizational AI transformation goals.
- Reduced development cycle times by 25% through strategic deployment of Claude Code and AI coding assistants across all development teams.
- Architected and implemented orchestrated sub-agent workflows featuring planning, implementation, and quality assurance agents that automated complex development processes.
- Eliminated eight hours of weekly exploratory time and 10 hours of manual effort by developing automated AI solutions for support ticket lifecycle processes in Monday.com.
- Built custom MCP servers from the ground up demonstrating best practices for AI tool integration across third-party services.
- Designed AI enablement solutions positioning organization for long-term competitive advantage through elimination of mundane development tasks.

- Managed team of five full-stack engineers while architecting enterprise-scale solutions and enforcing 100% code coverage standards through Test-Driven Development practices. Provided strategic technical leadership during organizational recovery following complete IT team departure with hands-on development responsibilities. Established consistent microservices patterns and solutions frameworks while driving adoption of Clean Code Architecture principles throughout the organization. Collaborated with enterprise architects under TOGAF framework ensuring scalable technical solutions and compliance across all platforms.
- Stabilized critical systems with zero accurate documentation by rapidly assessing infrastructure and implementing strategic technical frameworks.
- Reduced customer complaints by 25% and eliminated weekly billing failures affecting 25-50 customers through 'Overwatch' monitoring architecture implementation using event-driven frameworks.
- Eliminated 100+ stored procedures and complex linked server chains by re-architecting legacy systems into API-based solutions following Clean Code principles.
- Created single source of truth for business reporting through ETL architecture and development of proprietary FES data model with 80-100 structured tables.
- Built proprietary RAG AI model using Spring AI and PostgreSQL pgvector while developing secure query interfaces enabling conversational documentation access.
- Achieved zero-data-loss migration during critical billing platform transitions supporting new business opportunities.

- Executed software development projects for major financial institution while ensuring on-time, within-budget delivery. Collaborated with cross-functional teams to gather requirements and translate business needs into scalable technical specifications. Maintained quality assurance standards and established best practices for long-term codebase sustainability. Facilitated knowledge transfer sessions providing technical guidance to development team members.
- Reduced operational costs by 25% through strategic solution design and implementation for credit fraud detection operations.
- Eliminated unplanned downtime that previously forced end users to restart work, significantly enhancing system performance and user satisfaction.
- Transformed team culture by mentoring Clean Code Architecture adoption, driving test coverage from zero to 100% on all new development work.
- Secured additional project funding through clear communication of technical value via ArchiMate architecture presentations to non-technical stakeholders.
- Enhanced fraud detection accuracy through strategic reliability and resiliency feature engineering.

- Provided technical leadership for enterprise-wide technology transformation initiatives across multiple critical infrastructure projects. Maintained critical infrastructure supporting 4 major intrastate pipelines while ensuring operational continuity. Translated operational requirements into scalable technical solutions collaborating with business stakeholders to meet enterprise needs. Facilitated knowledge transfer programs and established development standards supporting organizational technology adoption.
- Enabled Citrix decommissioning through complete application modernization, transforming 300-page legacy Java Swing application to responsive, containerized Angular SPA.
- Processed millions of messages per hour through Enterprise Service Bus architecture while developing real-time SCADA data streaming solutions with sub-second latency.
- Supported company growth from four to 20+ pipelines through scalable framework engineering and development of configurable Grails solutions enabling pipeline-specific customizations.
- Transformed organizational development culture by introducing Agile methodology, modern web technologies, and Git migration strategies across multiple repositories.
- Established development best practices and user story frameworks while implementing version control solutions representing fundamental organizational evolution.

Education

University of Houston | Bachelor of Arts

Management of Information Systems and minor in Computer Science

Houston, TX

Professional Training & Certifications

AWS Certified AI Practitioner | Amazon Web Services