

Summary

Lead engineer with 8 years in large-scale enterprise software and platforms, now technical lead for production AI agents that act on users' behalf. Focus: reliability, rigorous evaluation, and shared foundations others build on.

Experience

Lead Application Developer	ADP, Pasadena, CA	Mar 2023 – Present
-----------------------------------	--------------------------	---------------------------

Workforce-management AI team

- Technical lead for the first AI assistant for employees within ADP Assist, from architecture to launch, cutting attendance recording from 3–4 s to 1–2 s end to end by bypassing multiple system layers, with confirmation before any pay-record is saved.
- Built the evaluation and monitoring foundation for AI agents, then used production data to fix a silent data-loss bug, a latency regression hidden by retries, and cross-server session inconsistency.
- Established an AI-Driven Development Life Cycle (AIDLC) for the team (specialist agents, reusable procedures, safety hooks) across multiple AI coding tools, and architected shared foundations for other teams' agents: a gateway giving agents tool access under each user's own permissions.
- Designed AI-action tracing and auditing across ~12 agents, and published an agent-identity contract, verified across five services, that records who initiated each action.
- Kept the team's AI agents grounded in current knowledge: architected a scheduled pipeline that detects code and document changes across platforms such as Bitbucket and Confluence, turns them into a searchable knowledge base of 60+ domain guides, and refreshes it every day.

Senior Application Developer	ADP, Pasadena, CA	Aug 2021 – Mar 2023
-------------------------------------	--------------------------	----------------------------

- Built and extended REST services and rules-engine logic that process employee time data for other ADP applications.
- Tuned the performance of high-volume processing jobs.
- Led a feature end to end, from design with architects through release.
- Mentored developers and reviewed code and designs for the team.

Application Developer	ADP, Pasadena, CA	Mar 2021 – Aug 2021
------------------------------	--------------------------	----------------------------

- Designed and built Java and Python services and features to meet client business requirements.
- Investigated and fixed defects in live systems with cross-functional teams.
- Worked directly with clients and product owners; wrote unit tests and documentation to keep the code maintainable.

Associate Application Developer	ADP, Pasadena, CA	Nov 2018 – Mar 2021
--	--------------------------	----------------------------

- Built the rules-based engine (Java, JBPM, Drools) that applies compliance rules to employee time punches, plus the REST services other ADP systems use. Designed with architects and domain experts using Domain-Driven Design; tested with JUnit and Cucumber.
- Cut a high-volume batch job's processing time 40% by redesigning transaction handling in Spring Batch; monitored releases with Splunk and Datadog.

Education

-
- **M.S. Computer Science**, California State University, Los Angeles (2016 – 2018); **B.Tech Computer Science and Engineering**, Guru Nanak Dev University (2012 – 2016)
 - **Medium**: "Function Calling Meets Drools: Creating Hybrid HR Agents that Think and Enforce Rules"
 - **Certificates**: Stanford Continuing Studies (non-degree): AI, AI Agents; DeepLearning.AI: Agentic Knowledge Graph Construction

Languages and Technologies

-
- **Agents and LLM**: Strands Agents SDK, MCP, A2A, human-in-the-loop flows, prompt-injection defense, model routing and failover, RAG and hybrid search, LLM-as-judge evaluation
 - **Platform and observability**: Python, FastAPI, Java, Spring Boot, Drools, Kafka, Kubernetes, AWS (Bedrock, AgentCore), MongoDB, Cassandra, MySQL, Langfuse, Arize/OpenInference, OpenTelemetry