

FRANS EEMIL Y. CORTEZ

Software Engineer — Full-Stack | Backend | AI / GenAI | Enterprise Applications

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PROFESSIONAL SUMMARY

Software Engineer with experience designing and delivering enterprise full-stack, backend, and AI-enabled applications. Hands-on across Python/Flask, Java/Spring Boot, React/TypeScript, Oracle Cloud, LLM applications, semantic/vector search, RAG, APIs, database design, security, automated testing, CI/CD, and production support. Experienced in end-to-end ownership, system modernization, technical leadership, and mentoring developers.

EXPERIENCE

Accenture Inc.

June 2022 – Present

Packaged Application Development Analyst

Cloud Developer Portal (CDP) & AI Auxiliary Tool (PAAT)

- Designed and implemented semantic/vector search across 5,000+ enterprise assets and tools using Oracle vector search, embeddings, Cohere, Python, SQL, and RAG, achieving an overall 35% improvement in search performance.
- Designed and shipped a production AI Insight Agent using Anthropic Claude with intent classification, prompt engineering, session memory, RAG, tool calling, LLM routing, guardrails, authentication, backend APIs, database integration, testing, deployment, and telemetry.
- Designed per-tier LLM model routing so lower-cost models handle basic requests while higher-capability models handle complex tasks, addressing unnecessary model spend across requests.
- Built an AI Token Usage Dashboard tracking token consumption, requests, model usage, teams, cost, errors, and quotas; used telemetry to identify repeated AI task execution and drive code refactoring to reduce unnecessary token consumption.
- Implemented AI security controls including jailbreak and prompt-injection detection, input validation, API authentication/authorization, and OCI Vault-based secret management.
- Optimized CDP/PAAT authentication by centralizing database authentication in CDP and passing a session identifier to PAAT, eliminating redundant authentication checks.
- Delivered frontend features and dashboard improvements using Java/Thymeleaf, Semantic UI, and Tailwind CSS.

Project Almanac

- Led end-to-end development of an internal AI-assisted development platform used across 6 teams, providing shared artifact management and guided AI workflows.
- Designed a chained AI workflow where Claude analyzes a project requirement and built-in tools sequentially generate process maps, flowcharts, ASCII wireframes, technical documentation, test scripts, release notes, and other development artifacts.
- Designed the workflow to guide teams adopting AI-assisted development, with observed productivity improvements of up to 30% and applicable planning/documentation work condensed from roughly five days to about one day depending on complexity.
- Owned architecture, backend, frontend, AI orchestration, prompt engineering, tool calling, caching, database integration, authentication, deployment, and testing.

Intelligent Data Migration (IDM) — Platform Revamp

- Re-architected a legacy Oracle APEX/Java migration platform into a React/TypeScript SPA backed by Python Flask, modernizing the application and integration architecture for Oracle Fusion.
- Implemented end-to-end Fusion loading through FBDI, HDL, SOAP EprIntegrationService using Zeep/WS-Security, UCM upload, and BI Publisher read-back, replacing a legacy Java service with Python.
- Designed an Oracle ADB data model and ERDs for migration capabilities supporting hundreds of thousands of records typically and millions at peak, with chunked and independently retrievable batches.
- Designed a target-environment registry supporting 50+ current and new client environments and centralized ERP/HCM load recipes.
- Implemented JWT-based authentication, replacing HTTP Basic authentication, with additional input-validation and API-authorization controls.
- Built automated end-to-end coverage with Playwright and used JUnit, pytest, and Postman across unit, integration, API, regression, performance, load, and security testing.
- Deployed the revamped application using Docker and supported Azure DevOps and OCI DevOps delivery workflows.
- Troubleshooted production issues including incorrect Fusion query routing after target-environment changes, restoring access by mapping requests to the correct environment.

Accenture Inc.

March 2021 – June 2022

Packaged Application Development Associate

- Developed Dialogflow conversational responses, dynamic variables, fallback mechanisms, third-party backend API integrations, chatbot UI improvements, and agent-routing components.
- Performed functional, regression, API, and conversational testing to validate response accuracy and application behavior.

System and Software Consulting Group Inc.

October 2019 – June 2020

Software Developer

- Created and implemented customized software solutions aligned with client-specific requirements.
- Tested and refined software before implementation or release.

TECHNICAL SKILLS

Languages & Frameworks: Python, Java, Flask, Spring Boot, TypeScript, React, Vite, JavaScript, Node.js

AI / GenAI: Anthropic Claude, OpenAI API, RAG, semantic search, vector search, AI agents, prompt engineering, tool calling, prompt caching, LLM routing

Cloud & Enterprise: Oracle Cloud Infrastructure, Oracle ADB, Oracle APEX, Oracle Fusion integrations, FBDI, HDL, UCM, BI Publisher, Azure DevOps, OCI DevOps

Web / UI: React, TypeScript, Tailwind CSS, Semantic UI, Java/Thymeleaf, responsive web development

APIs & Security: REST, SOAP, Zeep, JWT, WS-Security, API authentication/authorization, input validation, prompt-injection/jailbreak detection, OCI Vault

Testing & DevOps: JUnit, pytest, Postman, Playwright, Docker, Podman, OCI Container Instances, CI/CD, OCI Logging

Tools: Git, JIRA, Visual Studio Code, Eclipse

LEADERSHIP

Mentored 5–6 junior developers and provided technical guidance within a multidisciplinary engineering team of approximately 15 developers, 6 QA engineers, 2 technical leads, and an architect. Participated in requirements gathering, technical design, architecture discussions, database/API design, code reviews, testing strategy, deployment, production troubleshooting, release activities, and technical knowledge sharing.

EDUCATION

Eastwoods Professional College of Science and Technology

June 2015 – May 2019

Bachelor of Science in Computer Science | Computer Studies Representative | ESO (Eastwood Student Officers) | Best in Thesis — Flood Monitoring and Alerting System

CERTIFICATIONS

Oracle Cloud Infrastructure 2023 Foundation Associate

Mar 2024

Oracle Cloud Infrastructure 2023 AI Certified Foundations Associate

Mar 2024

Oracle Cloud Infrastructure 2021 Foundation Associate

Feb 2022

Oracle Cloud Platform Digital Assistant 2021 Specialist

Feb 2022