

Agentic System Architecture — LocoChat

Overview:

This document outlines the multi-modal, agentic AI workflow for extracting well report data, validating it, and performing nodal analysis.

Components:

- Ingestion & OCR - Retriever (ChromaDB) - Extractor (Llama3) - Vision Agent (Llava-Phi3) - Validator - Solver (VLP/IPR) - Orchestrator / UI

Agentic Principles:

Role specialization, determinism on numeric fields, auditability, human-in-the-loop for high-impact flags.