AI ARCHITECTURE

The LLM extracts. It never calculates.

A legal-tech tool that reads a contract and computes late-payment interest — and why the maths is kept out of the model's hands.

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CONTEXT

The problem

Read a contract, work out the interest owed. The obvious 2026 move is to hand it all to an LLM. I didn't.

1

The output has to survive scrutiny

This figure can land in a dispute. “Usually right” isn't a standard it can be held to.

2

LLMs are probabilistic

Right 98% of the time sounds great — until you remember the 2% is exactly where the argument happens.

3

So I split the job

Let the model do what it's good at, and let deterministic code do what has to be exact.

ARCHITECTURE

Where the line sits

AI DOES EXTRACTION

Pull the amount, due date and rate.

Return a page citation for each value.

Handle messy, real-world document layouts.

DETERMINISTIC ENGINE DOES MATHS

No model ever multiplies two numbers.

Splits the delay into sub-periods when the statutory rate changes.

Simple vs. compounding interest, by the rules.

PAYOFF

Why determinism wins here

100%

reproducible — same inputs, same memo, every run

Traceable by construction

Every sub-period in the output shows its rate, its day count and its source. You can audit the number back to the contract.

Portable by design

Rates and conventions are data, not code — a new jurisdiction is a new data file, not a rewrite.

Versioned engine

The calculation engine is versioned, so any memo can be reproduced exactly later.

TAKEAWAY

AI for judgment. Deterministic code for anything that has to be defensible.

The interesting design work in AI products is often deciding what the model is not allowed to touch. Where are you drawing that line?