

ImpactAI-lite

Instant Access to Causal Evidence (Offline Demo)

- Evidence-to-answer demo for development policy decisions
- Outputs are grounded in curated evidence cards with traceable source links
- Public version is offline (static outputs) to avoid exposing API credentials
- Production architecture (server-side LLM + retrieval + controls) documented separately

Candidate: Hilda(Hanyu) Wang | Live Demo: <https://hildahanyuwang.github.io/impactai-lite-portfolio/> | Repo: <https://github.com/hildahanyuwang/impactai-lite-portfolio/>

The Problem: Evidence Is Hard to Access

- Evidence is fragmented across papers, formats, and paywalls.
- Teams need traceable, decision-ready summaries (context + limits).
- Manual synthesis is slow and difficult to keep up-to-date.

Key takeaway

A credible system must reduce time-to-evidence while preserving traceability.

Why Generic GenAI Falls Short

- May produce unsupported or fabricated claims (hallucinations).
- Often lacks study-level citations and context (population, setting, design).
- Hard to audit: reviewers cannot easily trace statements to sources.

Key takeaway

For policy work, source-first outputs matter as much as fluency.

ImpactAI-lite: Evidence-Grounded by Desian

- Curated evidence cards capture intervention, outcome, context, and key finding.
- Top-K retrieval selects the most relevant cards for a question.
- Constrained summarization uses only retrieved evidence; states when evidence is insufficient.
- Outputs include evidence links, limitations, and suggested follow-ups.

Key takeaway

Reliability comes from constraints + citations + explicit limits.

Offline Demo Scope

- The demo renders precomputed answers for a small set of sample policy questions.
- All content is stored in the repository (evidence_cards.json + demo_outputs.json).
- Unknown queries prompt users to try sample questions (no external calls).
- Production architecture is documented separately (server-side only).

Key takeaway

Safe to publish on GitHub Pages; no API keys, no external dependencies.

Production Architecture (Not Included)

- Evidence store: curated database of validated impact evaluations (cards).
- Retrieval: Top-K selection (keyword or embeddings) over card fields.
- LLM: server-side generation constrained to retrieved cards only.
- Controls: rate limiting, access control, logging, and monitoring.

Key takeaway

In production, never expose keys in the client; enforce controls server-side.

Demo Output Format

- Answer summary (3–6 bullets) in plain language.
- Evidence table: card_id + claim supported + source link (audit trail).
- Applicability & limitations: what does/doesn't generalize.
- Suggested follow-up prompts for deeper exploration.

Key takeaway

This format supports review, sharing, and responsible decision-making.

Quality & Evaluation (Model-Agnostic)

- Groundedness: every claim maps to cited evidence used.
- Citation accuracy: links match the stated finding and context.
- No over-claiming: avoid global statements when evidence is local/contextual.
- Failure safety: explicitly say ‘insufficient evidence’ when retrieval is weak.

Key takeaway

The rubric applies regardless of the underlying LLM provider.

Users & Use Cases

- Development practitioners: rapid evidence scan for program design.
- Policy teams: compare interventions and outcomes with traceable sources.
- Donors/partners: triangulate evidence for funding and scale decisions.
- Researchers: identify evidence gaps and prioritize new questions.

Key takeaway

Tailor narrative and artifacts (briefs, decks, FAQs) by stakeholder.

Roadmap & Links

- Expand evidence coverage (sectors, geographies, languages) using public sources.
- Upgrade retrieval (embeddings) and add richer source anchors (tables/sections).
- Pilot with 1–2 partner teams; iterate based on feedback and QA metrics.
- Links: Live demo (GitHub Pages), repository, writing sample, contact.

Key takeaway

Clear path from portfolio demo to deployable system.