UDSL Architecture — arXiv Ready

Abstract

We introduce the Universal Document Structure Layer (UDSL), the first AI■native document architecture framework designed to eliminate structural drift and reasoning inconsistency in LLM■generated documents.

Introduction

Large Language Models generate sequences of tokens, not structured documents. UDSL provides a stable, enforceable structural ontology and reasoning schema.

Methods

We define a five■layer architecture: structure layer, reasoning layer, tone routing layer, UX constraint layer, and terminology coherence layer.

Results

UDSL improves cross-model consistency across ChatGPT, Claude, Gemini, and Perplexity by enforcing a shared document-state.

Conclusion

UDSL provides a foundation for future standardization efforts and can be used as an external scaffolding system for LLMs.