Augmented
Knowledge
Base Creation

Joshua Cook

Problem

Solution

Implementation

Augmented Knowledge Base Creation
LLM-Based Implementation

Joshua Cook

December 2024

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Problem

Solution

Implementation

Problem

- 19% of time spent searching information
- Exponential data growth
- Siloed knowledge
- Currency challenges

Solution

- Automated knowledge extraction
- Context-aware processing
- Human-in-the-loop validation
- Mathematical formalism

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Problem

Solution

Implementation

Implementation

Architecture

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Problem

Solution

Implementation

- Docker + Microservices
- FastAPI + Redis Queue
- MongoDB storage
- Next.js frontend
- LLM integration