Health Multi-Agent News System

Revolutionizing health news processing with multi-agent systems

Real-time aggregation and analysis of health information

Enhancing accuracy and reliability in news dissemination

The Health News Challenge

01 Abundant health news lacks actionable insights

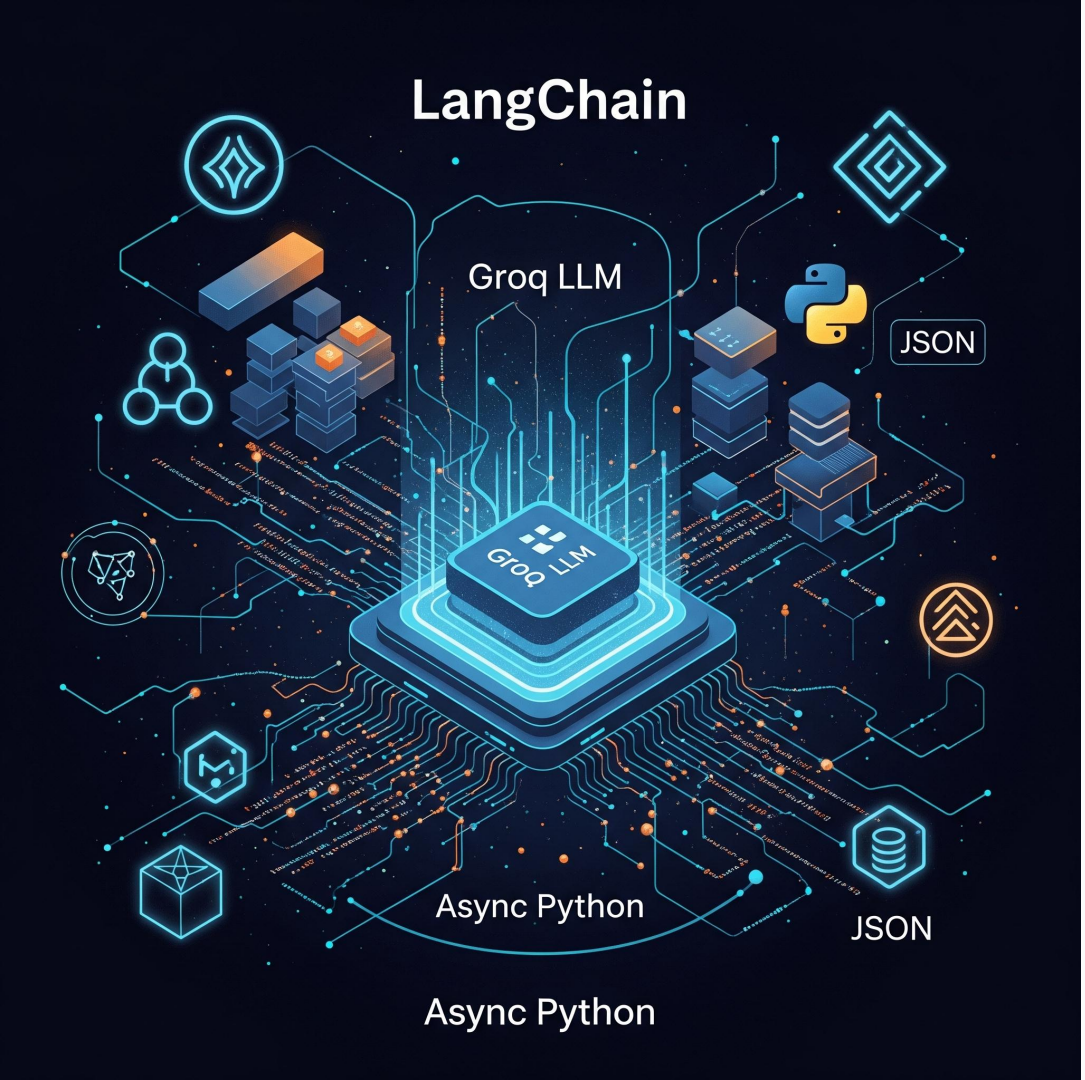
02 Classify health news to enhance understanding

03 Manual processing of health news is challenging

04 Automated pipeline needed for efficient summarization

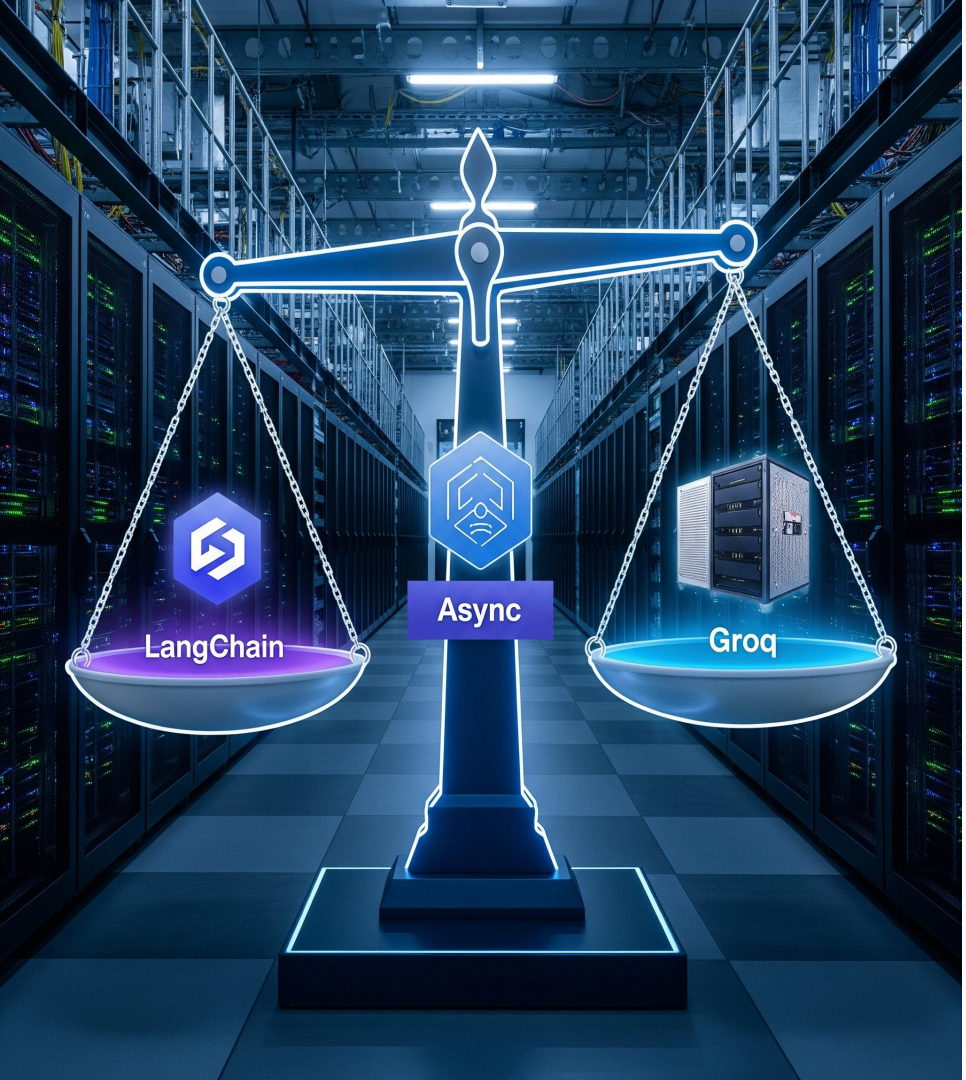
System Architecture Diagram

- Data Miner collects and processes health news
- Medical Summarizer extracts key medical information
- Decision Maker generates actionable health insights
- JSON Output provides structured, usable data



Our Tech Stack

- LangChain for effective agent orchestration
- Groq LLM provides powerful language model
- Async Python ensures high performance
- JSON used for structured data output



Key Tech Trade-offs

01 —— LangChain: fast prototyping versus overhead

02 —— Groq: low latency versus deprecation risks

03 —— Async: high throughput versus debugging complexity

Performance & Cost Metrics

- System processes 50 articles asynchronously
- Latency per article is approximately 2.1 seconds
- API usage costs about $0.02 per 1K tokens
- Smaller models offer lower cost with less accuracy

Future Work & Vision

- Integrate Vector DB for enhanced data retrieval
- Implement real-time health news stream processing
- Develop an interactive UI dashboard for insights
- Explore advanced AI models for better analysis