

Exploring AI Beyond Patterns: My Transition into KR

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Overview

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- 5 What Interests Me in KRR?
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- Recent Honours graduate from the University of the Western Cape **UWC**.
- Background in **AI**, particularly in NLP.
- Transitioning into **Knowledge Representation and Reasoning (KRR)**.
- Eager to explore how structured reasoning can complement AI models.

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 - Sentiment analysis for consumer feedback classification.
 - Neural networks for customer retention prediction.
 - Predictive maintenance using IoT and AI-enhanced monitoring.

- **Problem:** Clinicians struggle with lengthy, unstructured Electronic Health Records (EHRs).

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- **Problem:** Clinicians struggle with lengthy, unstructured Electronic Health Records (EHRs).
- **Solution:** Fine-tuned and optimized FLAN-T5 to generate targeted summaries.
- **Impact:** Improved workflow efficiency by reducing documentation burden.

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- I want to explore how **structured reasoning** can provide greater explainability.
- My interest lies in **bridging machine learning with formal logic**.

What Interests Me in KRR?

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- Integrating reasoning systems with data-driven AI.
- AI models that can explain their decisions logically.
- Systems capable of revising conclusions as new information arises.

Open Questions: Where Next?

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- What are the challenges in merging machine learning with logic-based reasoning?
- How can constraints improve AI adaptability?

Conclusion

- I'm eager to collaborate and learn from the KR community!
- Open to discussions on integrating reasoning with AI.

Thank you :)