

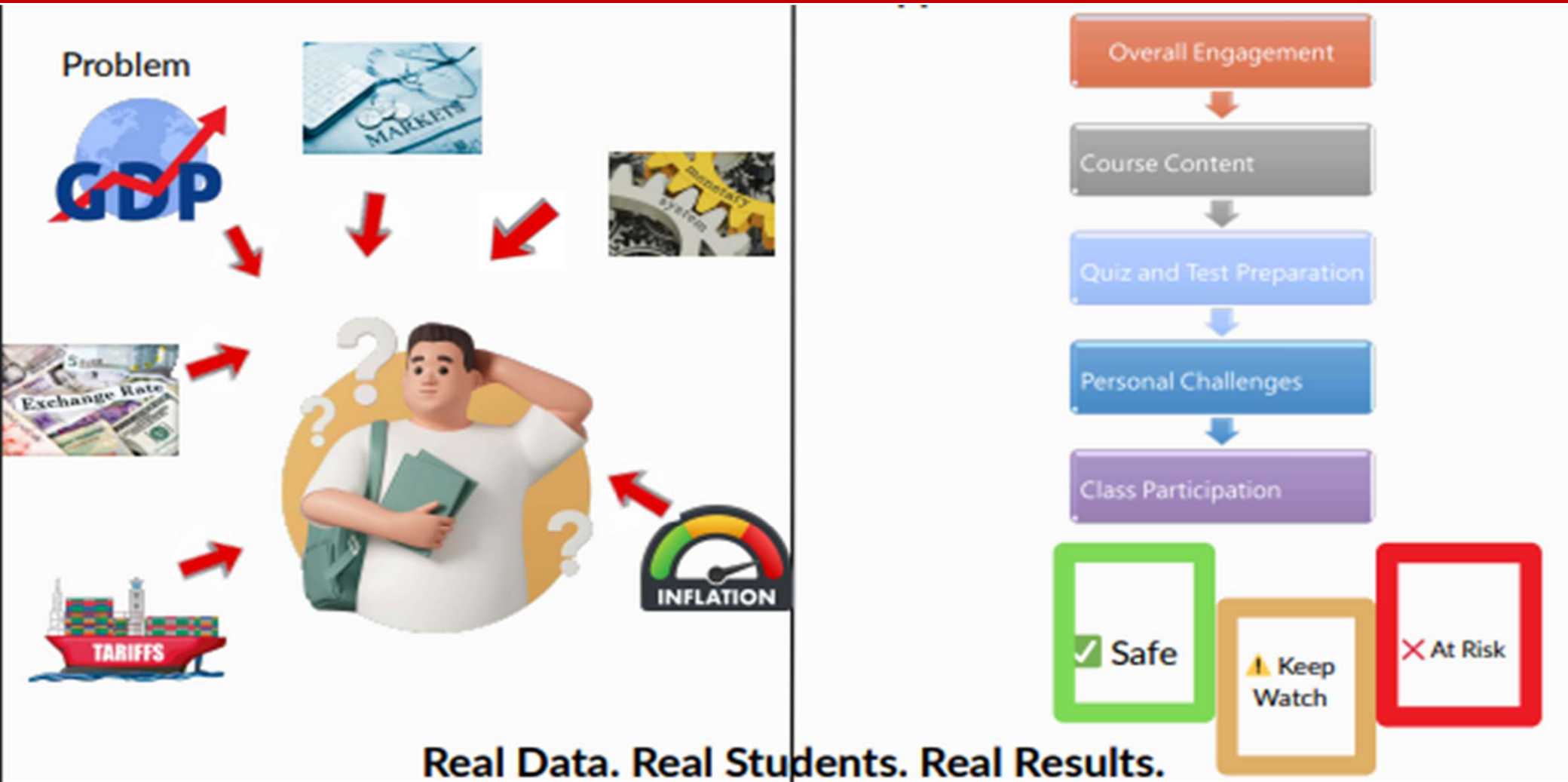
# Leveraging Artificial Intelligence for Personalized Learning and Student Success: Evidence from Economics Education

Sonal Pandey, Ph.D.

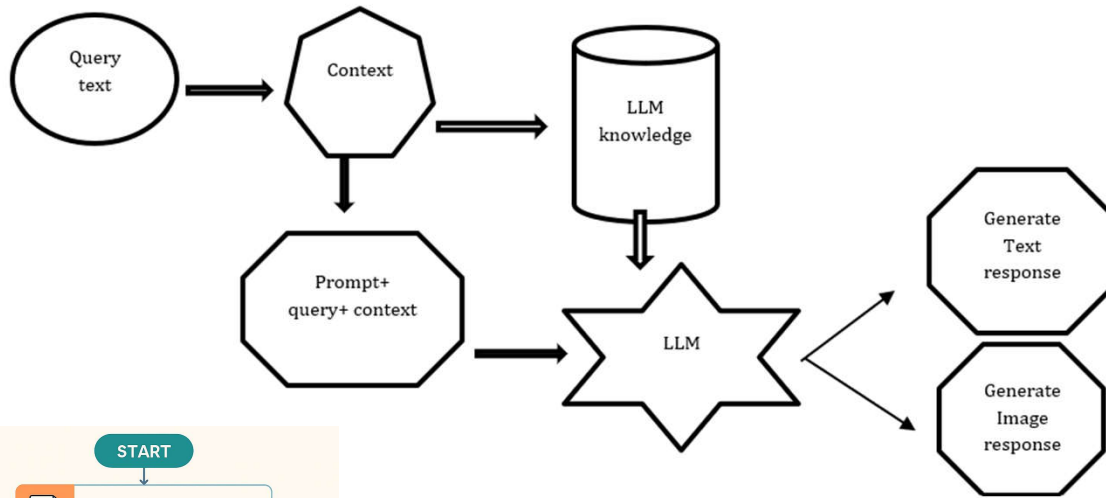
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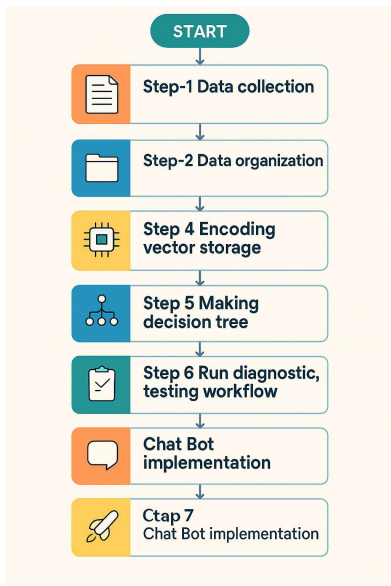
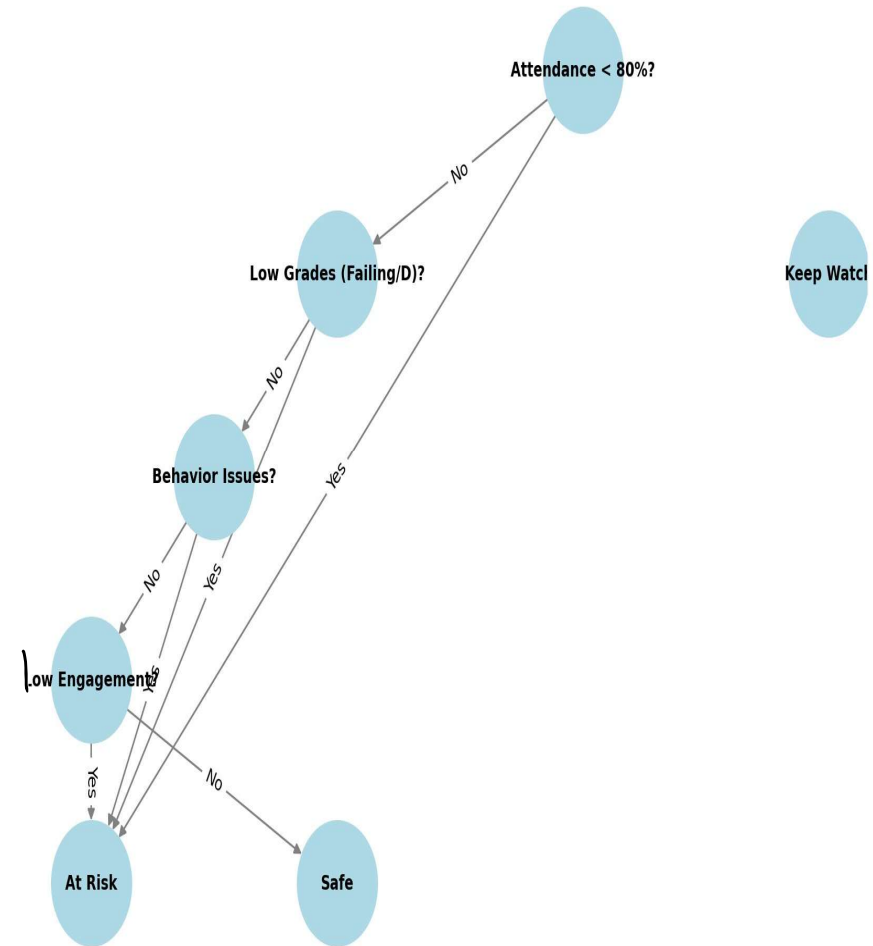
# Can AI Personalization Predict and Support Student Success?



# How We Built It: NLG+ Predictive Model + AI Chatbot



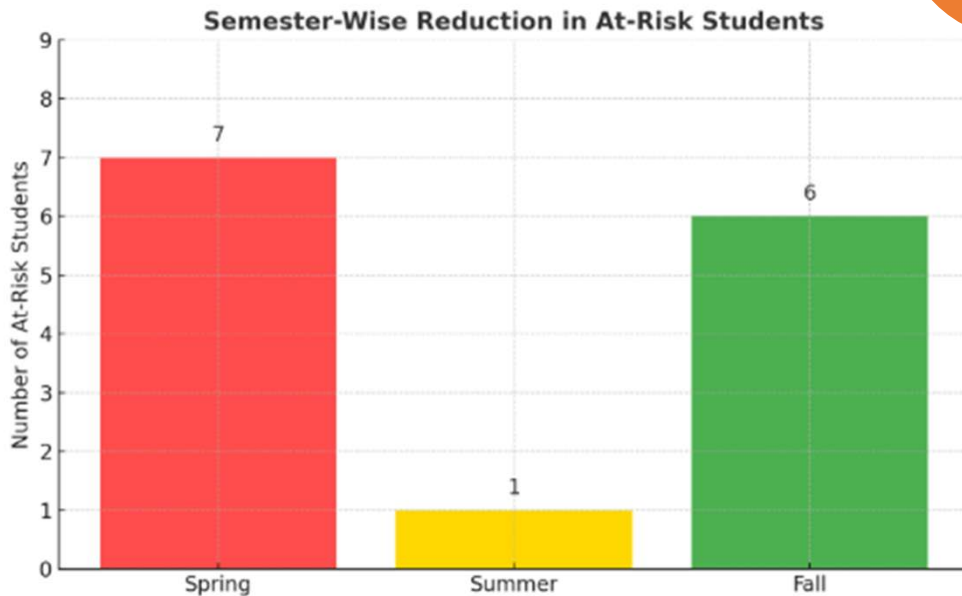
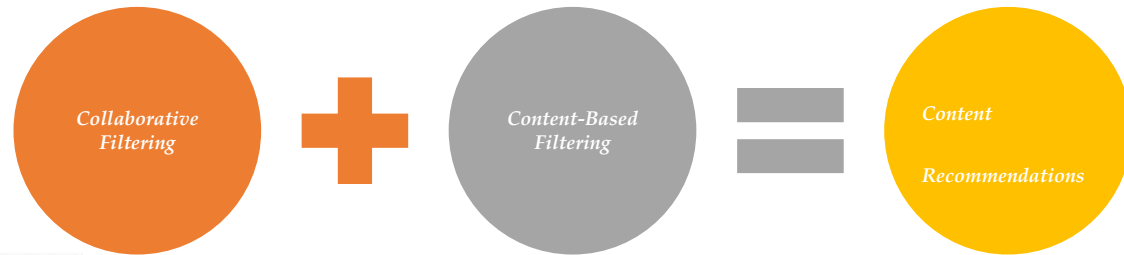
Decision Tree for Identifying At-Risk Students



Middlesex College, Ocean County College, and Mercer County College. Rutgers New Brunswick.

# Impactful Results & Future Roadmap

At-risk students (Spring → Summer → Fall).



- 💡 Improve chatbot accuracy with LLM fine-tuning
- 🌐 Expand to other disciplines (STEM, Business)
- 📚 Faculty training on prompt engineering
- 🏠 Integrate with campus-wide advising systems

**Students can participate in user-based surveys to enhance performance, making the process more resilient for every subject.**