Jill Watson and AskJill: AI-Powered Q&A Agents
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Background

Jill Watson (JW), first deployed in OMSCS classes in 2016, is a Q&A agent that answers questions related to course syllabus and schedule.

AskJill, evolved from JW, is an artificial intelligence explanation agent that can answer questions about the domain, operation and functionality of other AI systems.

Jill Watson in 2022

In Spring 2022, Jill Watson was deployed in 4 OMSCS courses:
- CS 7637 (622 students enrolled), CS 7646 (1426), CS6750 (492), and CS 6795 (95).

Jill Watson Automation
- Agent Smith-based automated training dataset generation.
- Automated HTML-based syllabus scraping.
- Automated domain knowledge database (SQL) generation.

AskJill in VERA

AskJill uses the User Guide for an AI-based interactive learning environment (VERA) to automatically answer user’s questions in the below categories:

Goal
- What is the goal of VERA?
- Getting Started
- System Requirements
- Definitions and Parameters

Default Values
- Value Units
- How Do I ...

AskJill in VERA Performance Results

Current Research

Scaling Jill Watson
- Introduce JW to dozens of classes, additional colleges and learning management systems.
- Can we build a Jill Watson for eBooks?
- How can we improve AI accuracy in answering user queries?

Task-Method-Knowledge (TMK) Models of AI Systems
- How can AI help build user trust by providing explanations?
- Is TMK a good framework for representing AI systems?

Acknowledgement
We thank NSF, IBM, Georgia Tech as well as past contributors: Varsha Achar, Ida Camacho, Eric Gregori, Shan Jing, Rohit Mujumdar, and Qiaosi Wang.