

Progress by Project Milestone

We have completed milestones 1, 2, and 3, which were all about setting up our environment, and making sure our data was finished parsing and was clean.

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Historical Evolution Analysis and Convergence Detection

We were able to complete a lot of these tasks simultaneously, convergence can be seen on the same graphs as the centrality metrics. Analysis is completed for the top 100 concepts and where they converge.

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AI Forecasting Engine

AI forecasting engine is contingent on completion of tasks 4 and 5, which are both in the works. Practiced connecting both Anthropic and local REBEL from HuggingFace into code, and utilizing it

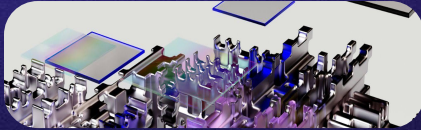
7

Visualization and User Experience

Complete the already started graph explorer, include information on tabs to show further information after Natural Language models are put into place. Waiting on the prediction model and the LLM.

Current Project Status

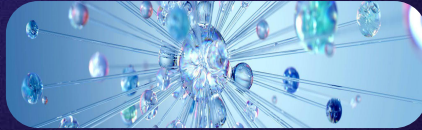
Our status is going well, but we are still facing some blockers along the way.



DATA + AI

Completed entire data collection and JSON conversion process

Updated GitHub repo with files from visualization and Wikipedia web scraper



PREDICTION

Completed robotics forecast for frontier concepts, ranked them by the most emergent

Tweaking and perfecting prediction and forecasting model with set parameters and Claude API



LLM

Using LLMs throughout, both local and non-local, set up secret keys and decided on Anthropic and REBEL from HuggingFace

Blocker: Waiting for prediction model to finish before running tests

Challenge: Working with smaller sample model



VISUALIZATION

Completed bug fixes for VSCode visualizer, uploaded current state to GitHub

Testing on smaller sample data model.

Blocker: Waiting for prediction model to provide more detailed results