Space Biology Knowledge Engine

NASA Space Apps Challenge 2025

Problem: NASA has 600+ bioscience publications, but insights are scattered.

Solution: An interactive knowledge engine that summarizes publications, links related studies, and visualizes trends, gaps, and key results.

Key Features:

- AI summarization of Results & Conclusions

- Knowledge Graphs linking experiments, species, outcomes

- Interactive Dashboard with search & filter

- Visualization of progress and knowledge gaps

Target Audience:

- Scientists developing new hypotheses

- Managers identifying investment opportunities

- Mission planners preparing for Moon and Mars exploration

Resources: NASA OSDR, Space Life Sciences Library, NASA Task Book

Next Steps: Build prototype dashboard, expand NLP summarization, and connect to live NASA databases.