

## ChatGM: Personalized LLM for Fantasy Football

### Client

JB Economy, [jbeconomy@mines.edu](mailto:jbeconomy@mines.edu)

### Background

I am an active-duty Army Officer, MBA, PMP, and a graduate student in the Space Resources graduate program here at Mines. I also led a Field Session team last year, where we learned a ton about practical applications of Large Language Models. After another year of developments in the field, I have a refined vision for an LLM application, and I need some technical help from some CS students.

### Project Goals:

The objective is to build, using already existing models, a Retrieval-Augmented Generation system to provide more informative, accurate, and contextually relevant responses from a LLM. The idea is to use a RAG model to provide personalized fantasy football advice. The project will involve:

- Building a database optimized for an LLM retrieval system (fantasy football stats, player/team information, etc.)
- Integrate open-source RAG models to efficiently query the database based on user inputs
- Integrate with existing LLMs to generate personalized, contextually appropriate responses
- Implement user-friendly chatbot interface

### Suggested Team Size:

2-4 students

### Benefits for Students:

This is will a highly creative startup experience, giving you the chance to learn, explore, experiment, and iterate with some of the most cutting-edge practical applications of LLMs. You will have a significant role in shaping the deliverables, and it will be a really cool opportunity to delve into LLMs, their use cases, and the implementation of RAG.

### Location of Work:

Completely remote

Note: Students will be required to sign an NDA and all intellectual property developed as part of this project will belong to me