

## **Company Background:**

AI Arrive is an artificial intelligence company with the vision to create AI products that accelerate research and enhance our understanding of human disease. AI Arrive partners with pharmaceutical clients to greatly accelerate R&D and drug development efforts by helping clients to make go/no-go decisions, prioritize drug targets, and uncover the mechanism of action (MoA) for drug targets. *ReferenceAnalysis* is a natural language processing (NLP) based project to determine the conclusion from a journal article by extracting meaning from sentences the journal article is referenced within. Although millions of biomedical journal articles are published each year tools to analyze and interpret those articles are in a state of infancy. *ReferenceAnalysis* can extract and find consensus among the articles that reference a particular research article.

**Team Size:** 4-5 Students

**Location**: Remote, client/team meetings will be held with Zoom.

**Project Summary**: AI Arrive would like to develop a beta *ReferenceAnalysis* solution using biomedical journal articles. The end goal would be to provide a summary output that explains the consensus finding among referenced articles. The client will provide a set of biomedical journal articles. The first step would be to extract reference sentences and the article. The next step would be to provide a recursive lookup that would extract author reference relationship and display these relationships using a graph database such as Neo4j. The next step would be to measure the similarity between these sentences. The final step would be to output the consensus finding and display the referenced relationships. All IP rights will be retained by AI Arrive.

**Key Skills/Technologies**: A background in developing ETL pipelines, NLP, working with graph databases Neo4j would be beneficial for tackling this project. The team can seek guidance from the client.

## **Student Benefits:**

- Freedom to develop a creative solution to the problem.
- Future paid internship opportunities
- Build leadership skills by seeing the project through to completion.
- Opportunity to work on a project that is high impact and can make a difference

## **Contact Information**:

• Dr. Michelle Archuleta, Founder & CEO AI Arrive: <a href="marchu0399@gmail.com">marchu0399@gmail.com</a> (303-218-8507)