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. *DiseaseScribe* enables researchers to identify patient data that pertains to their drug's mechanism of action.

Team Size: 4-5 Students

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

Project Summary: AI Arrive would like to refine an agentic framework that generates research reports based on conversations a user had with a RAG agent, Patient Specific Gene Networks, literature searches all capabilities that have been previously developed. This project will leverage MCP (Model Context Protocol) within AWS. Briefly, MCP is an agentic AI standardization protocol that connects AI agents to data and tools. The core MCP application was developed by the prior team (Summer 2025) and will be further refined to produce high quality research reports.

Another tool improved upon by another team (Summer 2025) is Patient Specific Gene Networks the MCP protocol will be expanded to query these networks specifically around mechanism of action MoA for a drug and include a summary and details in the MCP generated report. The client will provide research report templates and help create prompts for the agentic workflow.

Key Skills/Technologies: A background in agentic workflows, RAG/knowledge bases AWS, software development, and LLM would be beneficial for 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: marchu0399@gmail.com (303)-218-8507