

**CSCI 4140: Natural Language Processing**  
**CSCI/DASC 6040: Computational Analysis of Natural Languages**  
**Spring 2024**  
**Homework 4 – LLM applications**  
**Due Saturday, March 2, at 11:59 PM**

## Preliminary

Harvard University has an introductory course to Computer Science, CS50. During the Spring 2023 semester, they had a [guest talk from Ted Benson at Steamship](#), during which he presented some of the applications that can be built on top of ChatGPT, using their platform. This semester, we also had a [seminar with Eric Wang from IBM](#), during which he presented the [watsonx.ai](#) platform that brings together new generative AI capabilities, powered by foundation models and traditional machine learning into a powerful studio spanning the AI lifecycle. Your goal for this assignment is to use one of these platforms to build an application that uses LLMs. For this, you will have to read their documentation (e.g., [Steamship](#), [watsonx](#)), explore their templates (e.g., [Steamship](#)), watch YouTube videos, etc.

## 1 Requirements (100 pts)

1. (50 pts) Build a LLM application using either platform. For example, build a chatbot that answers questions for a specific course (by providing the syllabus and the slides to the model), or a chatbot that answers questions about admission to ECU. These are just some examples; you're welcome to use your creativity to build other applications that use LLMs with these platforms.
2. (50 pts) Create a short tutorial for your application (5 to 10 minutes). This should include the following:
  - How to configure your application (i.e., the “installation” steps).
  - What documents were used to “train” the application (syllabus, slides, other, etc.).
  - How to interact with your application (the “user guide”).

## 2 Extra credit (10 pts)

Build a similar application with the other platform and provide a short tutorial for this, as well.

## Submit

Upload to Canvas the following materials:

- A short video of your tutorial (5 to 10 minutes).
- The slides used in your tutorial.
- Any materials you used to “train” the application – to make your work reproducible.