# Basic Information

* **Project Title:** Examining the Consistency of UFO Sighting Reports
* **Group Members:**
  + Asa Adomatis, [asaa@clemson.edu](mailto:asaa@clemson.edu), C
  + Ellie Painter, \_\_\_\_\_\_\_\_\_\_\_\_
  + Emily Wilber, \_\_\_\_\_\_\_\_\_\_
* **Repo:** <https://github.com/AsaAdomatis/CPSC-4030-Project>

# Background and Motivation

# Project Objectives

* **Primary Goal:** Are there consistent patterns in UFO sightings Reports?
* **Secondary Goals:**
* Is there a consistent location or set of locations UFO sightings are likely to happen at?
* Is there a consistent time where UFO sightings are likely to happen at?
* Do similar sightings have a consistent description of the encounter?

# Data

* **NUFORC Data:**
* Link: <https://www.kaggle.com/datasets/NUFORC/ufo-sightings/versions/1/data>
* Alternative: <https://data.world/timothyrenner/ufo-sightings>
* This source is up to date, but not as well cleaned.
* **Population Data for US:**
* Link: <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html>
* **Shape Files for US Counties and States:**
* Link: <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html>

# Data Processing

* **Data Clean-Up:**
* The alternate dataset (2022) needs duration data to be converted from an unformatted string to a discrete number.
* **Derived Quantities:**
* A county attribute that’s derived from long. lat. or coordinates
* A more generalized shape attribute to group things like oval, and circle together
* **Data Processing Implementation:**
* We will use Python to convert the lat. long. data into county data

# Visualization Design

* **Consistent Location:**
* **Final:**
* **Type:**
* **Marks:**
* **Channels:**
* **Alternate 1:**
* **Alternate 2:**
* **Consistent Time:**
* **Final**
* **Alternate 1:**
* **Alternate 2:**
* **Consistent Shape:**
* **Final**
* **Alternate 1:**
* **Alternate 2:**

# Must-Have Features

* Filter each visualization by time frame
* Filter each visualization by shape
* Filter each visualization by state/county
* Show data in both raw form and both population adjusted form

# Optional Features

* Interact with data points on the geography and get additional description of the event
* Look at location visualization by country or by individual state

# Project Schedule