**Wasatch Animal Analysis**

**Team Members:**

Richard Thomas

Katherine Layton

Jesse Eng

Charlie Smoot

**Project Description:**

Analyzing human and animal traffic in the Wasatch to look for trends

**Research Questions:**

1. How do seasons impact animals
2. How do humans impact animals
3. How does weather impact animals
4. Correlation of temperature to humans and animals?
5. How does camera data compare to something like all trails?

**Datasets:**

Wildlife data (csv): <https://app.wildlifeinsights.org/explore>

Weather data (api): <https://www.weather.gov/documentation/services-web-api>

Sun data (api): <https://sunrise-sunset.org/api>

**Breakdown of tasks:**

1. Define data in the wildlife dataset
2. Merge all 3 data sources into 1
3. Play around with data and ask more questions
4. Identify limitations of the data

Random thoughts and links:

* Wildlife insights
  + Graph species count over time
    - What animals are present in Summer vs Winter?
  + Can we merge this with any other data?
    - How does climate impact species counts?
    - Vehicle traffic or foot traffic?
    - Merge in sunset data. Day/night/dawn/dusk
    - Merge in weather data. Sunny/Rainy/Cloudy
* Weather api: <https://www.weather.gov/documentation/services-web-api>
* Sun api: <https://sunrise-sunset.org/api>
* Wildlife data: <https://app.wildlifeinsights.org/explore>
* Climate data: <https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/states/utah>
* Utah park data: <https://stateparks.utah.gov/resources/park-visitation-data/>
* DNR water data: <https://dwre-utahdnr.opendata.arcgis.com/pages/wrlu>
* Trail data: <https://gis.utah.gov/data/recreation/trails/>
* Utah trails and pathways: <https://opendata.gis.utah.gov/datasets/utah::utah-trails-and-pathways/api>