# Contact information

## Name of each team member

Eli Harris, Tristan Fullmer, Ethan Nelson

The source of the data that you analyzed

# Introduction

## Describe the dataset that you chose, why the problem is interesting, what you hoped to accomplish as you began, and what you actually did accomplish.

The dataset that we chose was a dataset of black and white, and colored photos. Our goal was to use this dataset to make an algorithm to convert black and white photos to colored photos

# Data Preparation

## Describe the process of gathering, pre-processing, and otherwise preparing the data for analysis.

In order to pre-process our data we need to get the RGB values out of the image then convert the RGB values to LAB. we also might have to compress or stretch the data so they are all the same array size.

## Include examples of why this dataset was non-trivial and how you overcame these challenges.

Our dataset is non-trivial in a few way, one being the fact that the values are stored in a 3D array. Neural networks, at least to our understanding, are not easily able to handle 3D arrays. One way we are going to try to overcome this is to convert our data to a 2D array or a vector then revert the results back to a 3D array

# Mining / learning from the data

## Describe the process you used to mine the data, or learn patterns from it. What algorithms did you try, why did you try them? What parameters did you use and why?

## Make sure to discuss different things you tried along the way, even if they resulted in dead ends.

The first thing that we have tried is converting our data into a 2d array, however it has not been working too well.

## Highlight challenges you faced and how you overcame them.

The biggest challenge that we are facing so far is that we are having difficulty conveting our 3d array into a format that the neural network can use.

# Results

## Present the results that you obtained from the work done in the previous sections.

## Include graphs and charts to support your findings. (Don't forget to include proper titles, axis labels, etc. for all graphs)

# Conclusions (including business takeaways and action items)

## Describe why your results could be of value to a business or stakeholder in your area.

## What would they know or what could they do differently as a result of your work.

## Explain why your results constitute something "interesting."

## Don't forget to discuss potential limitations or ethical issues.

# Lessons Learned

## What did you learn from this project?

## What would you do differently if you could start this project again?