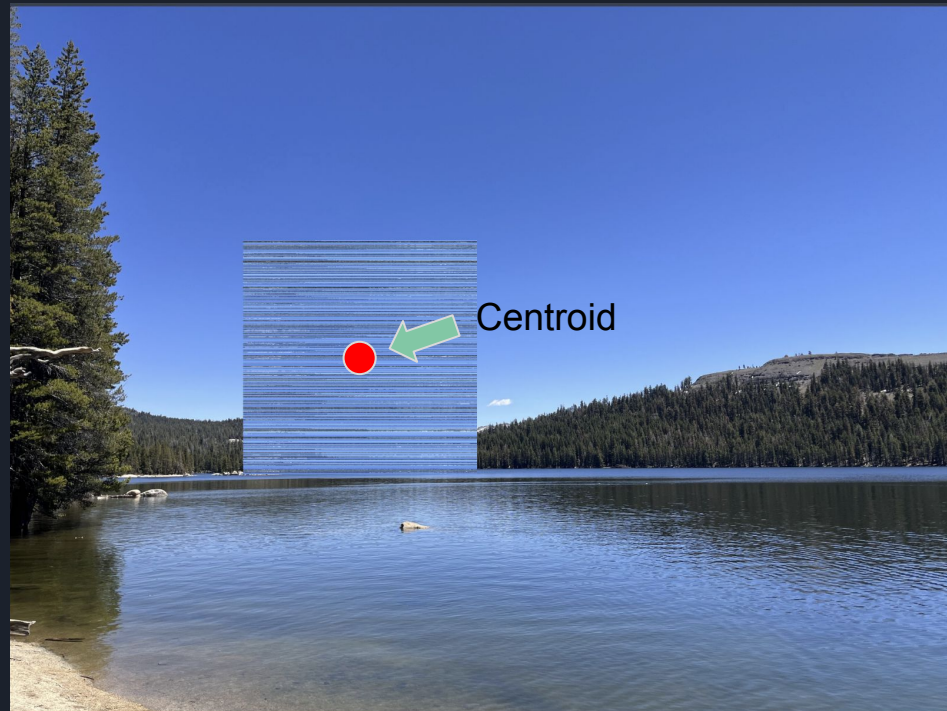




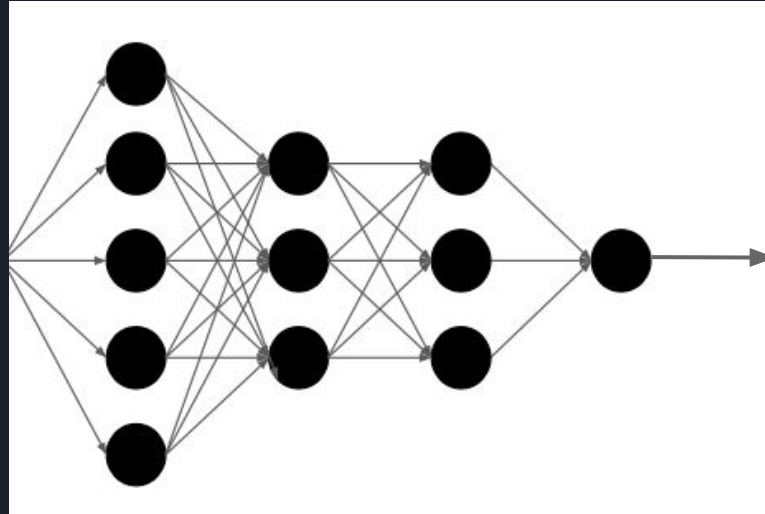
# MSDS 631 Project Presentation

**Anthony Wang**  
**Alan Wang**

# Scrambled Image Detection



# How Deep Learning is Used



coordinates of the centroid









# Dataset

- Wrote a script to scrape 200 photos and modify them

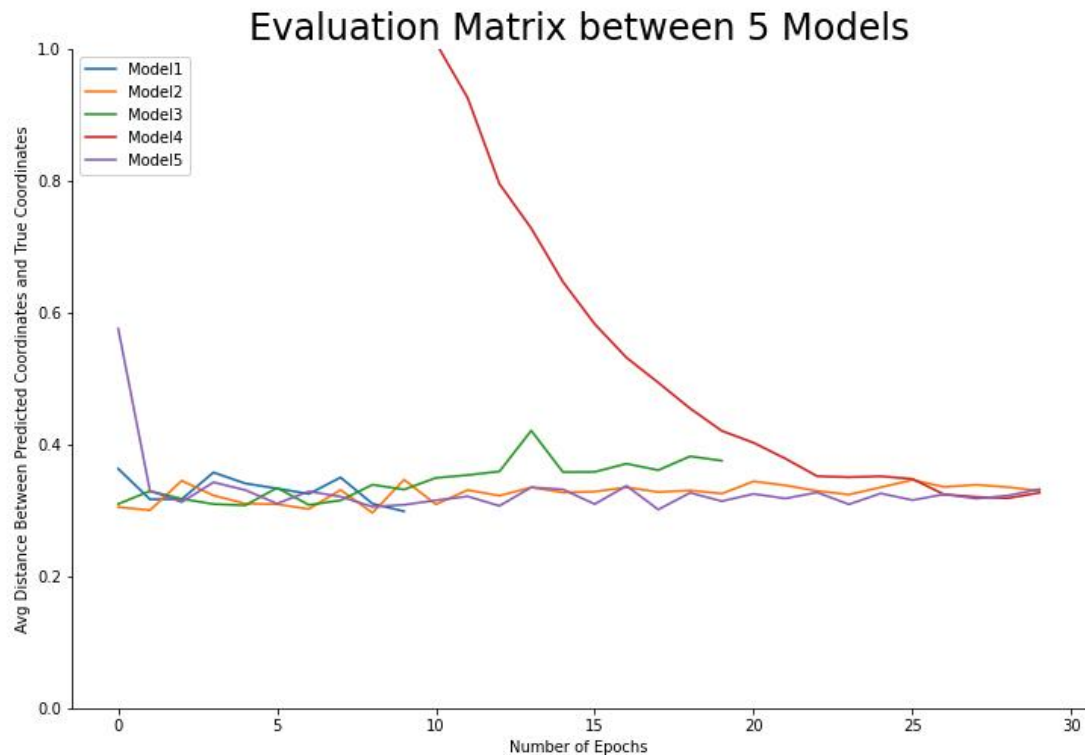
	x	y	r	discolor_ratio	img_path
0	599	120	89	1.08	/Users/anthonywang/Deep_Learning/landscape_scr...
1	376	646	30	1.08	/Users/anthonywang/Deep_Learning/landscape_scr...
2	246	281	30	1.10	/Users/anthonywang/Deep_Learning/landscape_scr...
3	480	360	174	1.08	/Users/anthonywang/Deep_Learning/landscape_scr...
4	223	430	111	1.14	/Users/anthonywang/Deep_Learning/landscape_scr...



# Models Used

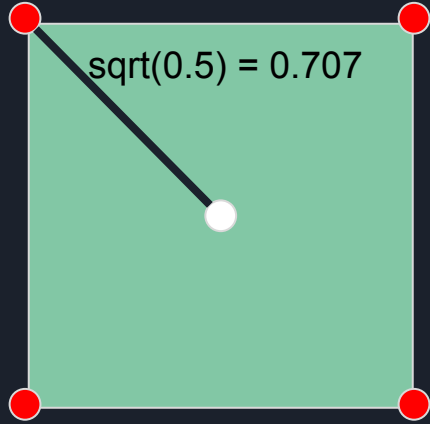
- Model 1: Images w/ high learning rate and fewer epochs
- Model 2: Images w/ low learning rate and more epochs
- Model 3: Images and numerical features before fully connected layers
- Model 4: Images and numerical features before last connected layers
- Model 5: Images and numerical features pass through linear layer before last connected layers

# Results

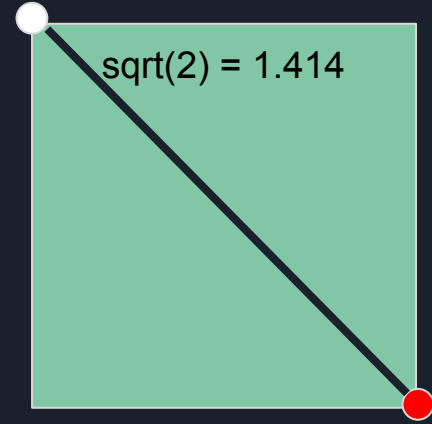




# Distance Metric Discussion



Scenario 1



Scenario 2

- True Coordinates
- Worst Possible Predicted Coordinates