

# Analyzing Color in the Fine Arts, from Time to Region

A Visualization Project



# Our Company - Budget Collector

- Art Tech Start-Up
- App Driven
- Research / Data Science Focused
- Re-evaluating the Art Market
- Inclusivity
- Connections



**From App  
To Exhibit**

# Who You Would Be Working With



Anya Ellis

- Interests: CS Ethics and Fairness
- Favorite Art Movements: Surrealism and the Dark Art Movement

Technology Lead



Ebonique Boyd

- Interests: People over profit, marketing
- Favorite Art Topics: Enlightenment era paintings of people of color

Product Lead

# Background Information

Color can be very representative of art movements. Deep colors are associated with the Baroque movement while light soft colors are pivotal to the vaporwave aesthetic. These movements themselves center around a particular region, before maybe moving toward globalization.



*The Musicians' Brawl* by Georges de La Tour; Public domain, via Wikimedia Commons

Cover of *TMP2* by Ahn Yubin (ZIK); Music by Graham Kartna



## Problem Statement

We, at Budget Collector, believe a time series analyzing color representation in art that correlates geographic regions could help art historians have a greater ease in connecting color changes with changes in art movements, globally.

## Objective

- 1) Find dominant and secondary colors in different artworks
- 2) Analyze correlations and trends between colors, regions, and time.
- 3) Create a hostable interactive time series



# Data Sets

The student can either use our internal data set with around 400 images or an external data set of an art institution of their choice.

<b>Name</b>	Coalition 03	Eve
<b>Artist</b>	Ali Akbar Sadeghi	Auguste Rodin
<b>Region</b>	Middle East	Europe
<b>Date</b>	2001	modeled. 1881, cast. 1910

- Some institutions that have part or all of their collection displayed online:
  - Art Institute of Chicago
  - The Rijksmuseum
  - Museum of Modern Art



# A Snippet from The Art Institute of Chicago Data Set

<b>title</b>	Simon Vouet	Commodus
<b>date_start</b>	1630	180
<b>date_end</b>	1636	192
<b>date_display</b>	1630/36	A.D. 180–192
<b>artist_display</b>	Robert van Voerst (Flemish, 1597-1636/37) after Anthony van Dyck (Flemish, 1599-1641)	Roman
<b>place_of_origin</b>	Flanders	Roman Empire

# Deliverables

- Three 1-page articles updating on progress.
  - Due week 3, 5, 7
  - This will be posted on the company blog. (Students can repost articles elsewhere, but must make mention of that through appropriate channels).
- Implement an interactive time series visualization
  - Due week 14
  - This will be hosted on the company website, and students are expected to help setup hosting of the project, depending on code choices.
- Cleaned Github Repo
  - Due week 15
  - This should have a readme file, an open source license (GNU AGPLv3), code with comments and documentation at the top of each file.
- Mid-term PPT Deck
  - This should be no different than the course requirement.
- Written Final Report
  - This should be no different than the course requirement.
- Final Presentation, recorded
  - This should be no different than the course requirement.





# Recommended Method of Completion

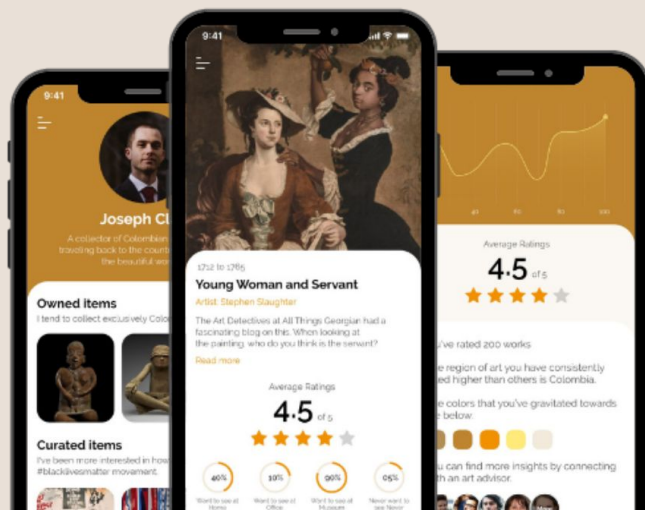
- 1) Choose a dataset (considering interest, formatting, regional info, etc)
- 2) Define a method to pull out color information (Python Image Library, OpenCV)
- 3) Do some basic analysis and comparisons
- 4) Decide on the visualization method & web framework (OpenGL, Flask, etc)
- 5) Fix errors! And, Simplify!
- 6) Finish the final report and presentation



# Questions



SCAN  
ME



BUDGET COLLECTOR