

Weekly Report No. 2

Artwork Super-resolution Scanning Application

9/16/2023 – 9/27/2023

Isaac Plambeck • Reece Dodge • Samuel Schaphorst • Garrett Powell

Client/Advisor: Dr. Thomas Daniels

Weekly Summary

Past Week Accomplishments

As a Group

- Researched color correction with open cv

Isaac – *Software Development Lead*

- Worked on perspective correction and crop algorithm for aruco markers.

Reece Dodge – *Project Lead*

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Samuel Schaphorst – *Testing/Quality Assurance Lead*

- Set up wooden frames equipped with pantone cards around canvas and took pictures to use for future coding endeavours

Garrett Powell – *Electrical Design Lead*

- Began looking into openCV code for color correction with Pantone color match cards
- Basic research into various potential noise reduction methods to incorporate in the noise reduction function

Pending Issues

As a Group

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Isaac

- None

Reece

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Samuel

- None

Garrett

- None

Individual Contributions

<i>Team Member</i>	<i>Contributions</i>	<i>Hours - This Week</i>	<i>Hours - Cumulative</i>
<i>Isaac Plambeck</i> <i>Software Development Lead</i>	<ul style="list-style-type: none"> • Aruco Corner Detection Algoritm • Website Update • Cropping and Perspective algoritm work 	5	12
<i>Reece Dodge</i> <i>Project Lead</i>	<ul style="list-style-type: none"> • 		
<i>Samuel Schaphorst</i> <i>Testing/Quality Assurance Lead</i>	<ul style="list-style-type: none"> • Set up canvas with different lightings • Put pantone cards on wood panels • Researched color correction in opencv 	5	10
<i>Garrett Powell</i>	<ul style="list-style-type: none"> • Began looking into how to incorporate Pantone cards with openCV 	4	8

<i>Electrical Design Lead</i>	<ul style="list-style-type: none">• Basic research into noise reduction.		
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Comments and Extended Discussion

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Plans for the Upcoming Week

As a Group

- Start implementing color correction on canvas pictures

Isaac

- Continue new cropping algorithm work

Reece

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Samuel

- Start coding and gathering results for color correction

Garrett

- Work on development for noise reduction function
- Work on implementations of openCV color correction with Pantone cards

Summary of Weekly Advisor Meeting

- Discussed border correction with aruco and created wood panels to frame canvas with pantone cards in each corner
- Found an equation to use when determining how much of each card to use for every pixel of artwork