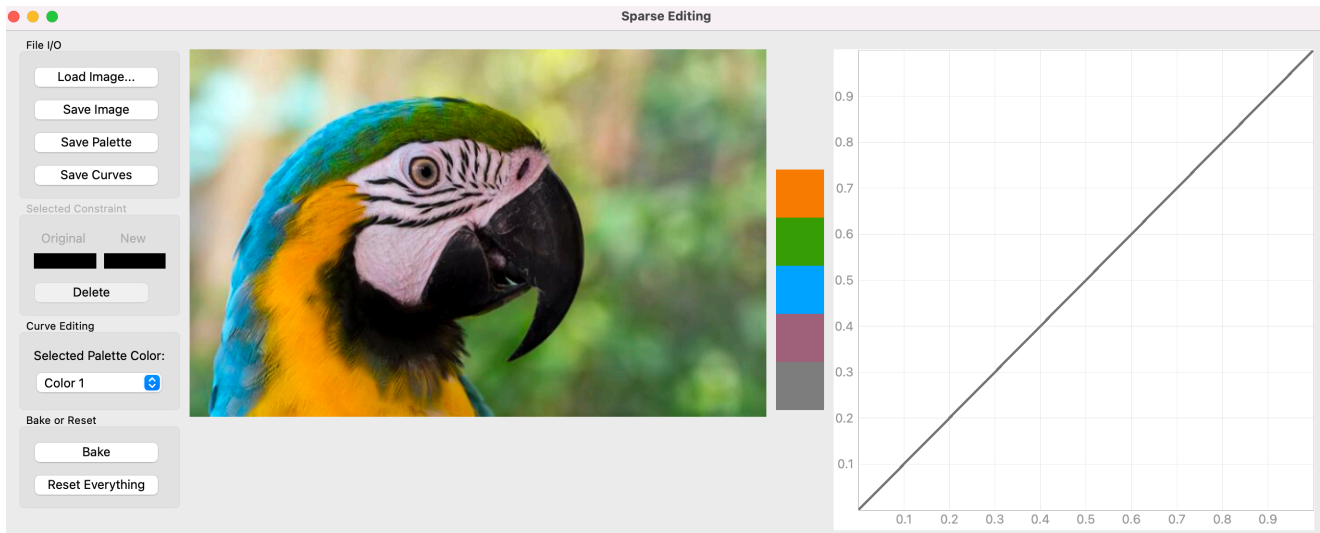


User Study

Part I: Luminance Curves

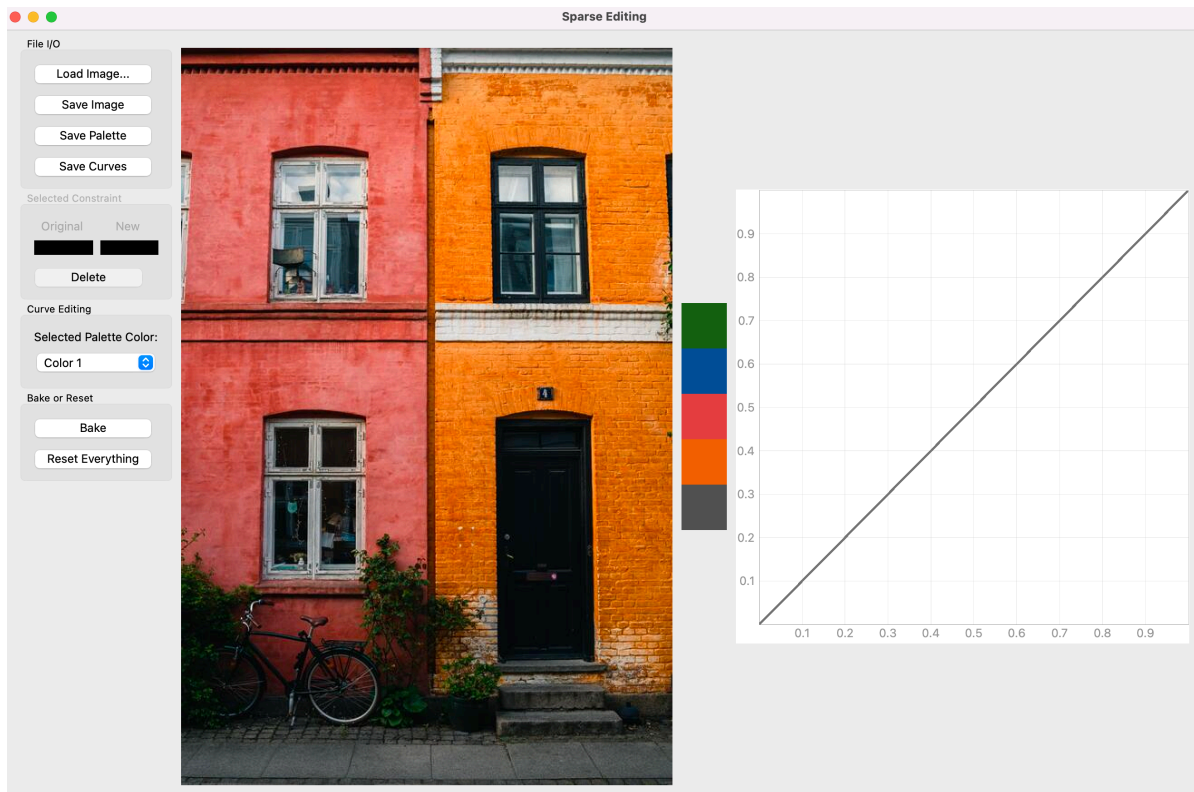
1. Load the *parrot.jpg* image using our **ColorfulCurves** program. You should see the following window with a photo of a parrot.



2. Notice how the forehead of the parrot is a dark green (low tone). The majority of the background is lighter green (mid/high tone) colors.
3. Please use curve controls **on the right panel** to perform the following editing request. Record the time it takes you (in minutes).
 - A. Make **the forehead** and **the yellow feathers** of the parrot darker while maintaining the luminance of the background as much as possible. See the included *parrot-edit.png* image as an example.
4. Save your edited image and curves by clicking the *Save Image* and *Save Curves* buttons.
5. Perform the same editing request in the image editing tool you are most comfortable with, such as *Lightroom*, *Photoshop*, *Affinity Photo*, *Pixelmator*, *Darktable*, etc. Start with the original *parrot.jpg* image. Record the time it takes you (in minutes). Save your edited image and curves.

Part II: Editing Color and Luminance

1. Load the *andreas.jpg* image using our **ColorfulCurves** program. You should see the following window with a photo of two buildings.



2. Use any of *ColorfulCurve*'s functionality to perform all of the following editing requests. You can place image, palette, or curve constraints. Record the total time it takes you (in minutes). See the included *andreas-edit.png* image as an example.
 - A. Swap the colors of the two buildings. Make the red building orange and the orange building red.
 - B. Change the contrast independently on the two buildings.
 - C. Change the leaves of the tree into fall colors.
3. Save your edited image and curves by clicking the *Save Image* and *Save Curves* buttons.
4. Perform the same editing request in the image editing tool you are most comfortable with, such as *Lightroom*, *Photoshop*, *Affinity Photo*, *Pixelmator*, *Darktable*, etc. Start with the original *andreas.jpg* image. Record the time it takes you (in minutes). Save your edited image and curves.

Part III: Your Image

1. Load any image you'd like into **ColorfulCurves**. Note that **ColorfulCurves** will resize the image so that it fits on-screen.
2. Use any of **ColorfulCurve**'s functionality to perform an image edit you are happy with.
3. Save your edited image and curves by clicking the *Save Image* and *Save Curves* buttons.

Part IV: Questionnaire

Please share the editing results you made and fill out the following questionnaire to tell us about your experience:

<https://forms.gle/JnKECK8FKCV6GdZv8>

Thank you for your participation!