Midterm project

Content

* Abstract: One or two sentences on the motivation behind the problem you are solving. One or two sentences describing the approach you took. One or two sentences on the main result you obtained. - **Claudia**
* Teaser figure: A figure that conveys the main idea behind the project or the main application being addressed. - **Evan**
* Introduction: Motivation behind the problem you are solving, what applications it has, any brief background on the particular domain you are working in (if not regular RBG photographs), etc. If you are using a new way to solve an existing problem, briefly mention and describe the existing approaches and tell us how your approach is new. - **Collin**
* Approach: Describe very clearly and systematically your approach to solve the problem. Tell us exactly what existing implementations you used to build your system. Tell us what obstacles you faced and how you addressed them. Justify any design choices or judgment calls you made in your approach.
  + Tile method - Claudia Jack
  + Interpolation method - Evan Collin
* Experiments and results: Provide details about the experimental set up (number of images/videos, number of datasets you experimented with, train/test split if you used machine learning algorithms, etc.). Describe the evaluation metrics you used to evaluate how well your approach is working. Include clear figures and tables, as well as illustrative qualitative examples if appropriate. Be sure to include obvious baselines to see if your approach is doing better than a naive approach (e.g. for classification accuracy, how well would a classifier do that made random decisions?). Also discuss any parameters of your algorithms, and tell us how you set the values of those parameters. You can also show us how the performance varies as you change those parameter values. Be sure to discuss any trends you see in your results, and explain why these trends make sense. Are the results as expected? Why?
* Qualitative results: Show several visual examples of inputs/outputs of your system (success cases and failures) that help us better understand your approach.
  + Tile method - Claudia
* Conclusion and future work: Conclusion would likely make the same points as the abstract. Discuss any future ideas you have to make your approach better. - **Claudia**
* References: List out all the references you have used for your work.

Tasks

* Write content
  + Abstract - **Claudia**
  + Teaser - **Evan**
  + Intro - **Collin** (steal from project proposal)
    - There are papers for generating celtic knots, but not for identifying them/identifying their structure
    - List some interesting applications
  + Approach
    - Tile
    - Interpolation
  + Experiments and results
    - Tile
      * Generating dataset - **Jack**
      * Success cases -
        + strand width, gap width match, overlap width
        + Template matching tiles to multiple places
    - Interpolation
  + Qualitative results
    - Tile - Pictures
    - Interpolation
  + Conclusion and future work - **Jack**
  + References - Everyone
    - Include tutorials and packages
* Make the website template - **Evan**

Timeline

* Monday/Tuesday - Jack and Claudia
* Thursday at 5p - checkin meeting

Notes

* Need to resolve dead ends