Project Proposal

**Title:**

Template Matching for Image Processing

**Team Members:**

Tim Buranicz

**Abstract:**

**Problem Description:**

**Intellectual Challenge:**

**Resources:**

As for the code, we will be starting mainly from scratch, pulling various bits and resources from other codes that we have worked on (Ex: Pulling I/O or data handling functions from another function as necessary). We will utilize GitHub in order to manage and organize the project. For references to the algorithms necessary to complete this project, we will be utilizing these sources: ADD SOURCES HERE

**Work Plan Schedule:**

As a team, we will a set work plan schedule set in place. Every week, we will discuss what we have done and how far we have progressed in the project up until that point. If at any point in time there is an obstacle, we will make that clear to the other team members as soon as possible. For each week, we hope to get a portion of the project done, say approximately 15% of it per week. Around week 13, we estimate ~80-90% of it done, with the last couple weeks reserved for creating the project presentation, finishing up the project, writing the report, as well as perform any testing that is necessary. Work will be divided amongst the group in a function fashion, so that each person will handle a certain aspect of the project, for example: one member might handle the data input, one may handle the calculations, another the output, etc. This of course is an example, and we expect the workload to fluctuate between tasks, hence why this isn’t a strict assignment of tasks.

|  |  |
| --- | --- |
| Week | Work |
| 8 | Finish Project Proposal |
| 9 | Start Project + 10% of work |
| 10 | Up to 45% |
| 11 | Up to 60% |
| 12 | Up to 70%, Work on Presentation |
| 13 | Up to 85% |
| 14 | Finish Project, Testing, Report |
| 15 | Finishing Touches |
| 16 | N/A |

**References:**

**4 references required, PROPERLY CITED**

[**https://medium.com/analytics-vidhya/image-processing-template-matching-aac0c1cbe2c0**](https://medium.com/analytics-vidhya/image-processing-template-matching-aac0c1cbe2c0)

[**https://en.wikipedia.org/wiki/Template\_matching#:~:text=Template%20matching%20is%20a%20technique,or%20edge%20detection%20in%20images**](https://en.wikipedia.org/wiki/Template_matching#:~:text=Template%20matching%20is%20a%20technique,or%20edge%20detection%20in%20images)**.**

[**https://docs.opencv.org/3.4/de/da9/tutorial\_template\_matching.html**](https://docs.opencv.org/3.4/de/da9/tutorial_template_matching.html)

**https://www.sciencedirect.com/science/article/pii/S2590197421000124**