

IMAGE COLOURIZATION VIA CONVOLUTIONAL NEURAL NETWORKS AND DEEP LEARNING

Harkirpa Kaur

Student# 1011242479

`harkirpa.kaur@mail.utoronto.ca`

Total Pages: 1

1 CONTRIBUTIONS

Harkirpa	Peter	Thulasi	Youssef
24%	23%	26%	27%

Table 1: Contribution percentages by team member

I was responsible for several tasks as the team worked through the image colorization project. Starting with the progress report, I researched factors that facilitated the need for image colorization and the history of colourized photography. I researched and compiled possible ethical considerations related to image colorization. For the progress report, I wrote the individual contributions section and updated the Gantt chart. I also researched and implemented techniques to decrease run time for our primary model. Our model was also facing an issue with avoiding vibrant colours and resorting to brown hues. To combat this, I researched and implemented a quantized bin classification method in our existing model. However, this method was not implemented in the final model. For the final report, I wrote the quantitative results and project difficulty sections and updated the slideshow accordingly.

Throughout the project, the team held weekly meetings to discuss progress and next steps for the project. The meetings were led on a rotating basis such that each team member prepared the meeting agenda for and led 25% of all meetings.

Of the tasks I undertook, there were some that I was unable to complete. These included writing the abstract for the project proposal and working on the initial version of the primary model. The abstract was written by another team member, as they had finished their assigned parts early. The initial primary model was assigned to Youssef and me; however, we faced difficulties collaborating on Google Colab in addition to being in different time zones. To optimize time management, the team agreed to have Youssef write the code for the initial primary model, and we agreed to collaborate on any other versions of the model we may have to create, such as the quantized bin version.

Overall, all team members put in a roughly equal amount of work, and we are all satisfied with the quality and quantity of each member's work.