Ljubljana, April 26 2021

MASTER THESIS ASSIGNMENT

Student: **Adi Čaušević**

Title: **Image Colorization Methods**

Description:

Greyscale or 8-bit images take up significantly less memory space compared to RGB images that use 24 bits. Sometimes greyscale images are the only thing available, e.g. in the case of historical photographs. Image colorization is a process in which colours are reconstructed using original grayscale image.

Within the thesis study and describe image colorization methods. Special attention should be paid to methods based on soft computing, such as the use of neural networks (today typically deep models). Implementations of at least three different state of the art methods have to be trained and evaluated. The thesis should encompass the source code and other relevant material for recreating the results. The results have to be explained, supported with arguments. The used literature has to be cited and the obtained help acknowledged.

I agree with publishing the final version of the thesis in electronic form on the website of the Faculty of Electrical Engineering and Computing, University of Zagreb, as well as in the public Croatian Digital Thesis Repository of the National and University Library.

Mentor:

Prof. Dr. Peter Peer

Assoc. Prof. Dr. Marko Čupić