



# DEFESA DE DISSERTAÇÃO DE MESTRADO

*Programa de Pós-Graduação em Ciência da Computação*

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## STYLE TRANSFER FOR TEXT-BASED IMAGE MANIPULATION

ALUNO: Martin Duarte Móre

ORIENTADOR: Dr. Rodrigo Coelho Barros

BANCA EXAMINADORA: Dr. Cláudio Rosito Jung (PPGC/UFRGS), Dra. Soraia Raupp Musse (PPGCC/PUCRS)

DATA: 28 de março de 2019

LOCAL: Prédio 32, sala 517

HORÁRIO: 14:15

### RESUMO:

A large amount of the data we produce nowadays is in the form of digital photographs, which increases the demand for photo editing applications. However, image manipulation has a steep learning curve; as such, it would be invaluable to automate or simplify this artistic process to make it more accessible. In this study, we investigate the use of a subset of natural language (more specifically, textual descriptions of objects) as input to automatize image manipulation. We propose a deep learning approach for the task of textbased image manipulation that combines adversarial learning and style transfer concepts. We evaluate our method, compare it to baseline approaches, and conclude that our results have competitive quality when compared to the current state-of-the-art.

Keywords: Image Manipulation, Natural Language, Adversarial Training, Style Transfer, Image Synthesis, GANs.