

硕 士 研 究 生 读 书 报 告



题目 自动化图像调整方案研究

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提交日期 二○ 一五 年 十二 月

Research on Automatic Image Adjustment Scheme

A Dissertation Submitted to

Zhejiang University

in partial fulfillment of the requirements for

the degree of

Master of Engineering

Major Subject: Software Engineering

Advisor: Li QiLei

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Zhejiang University, P.R. China

2015

摘要

现实生活中摄影师可以通过其自身的技能来提升照片的整体视觉美感，然而，对于普通人来说这是一项具有挑战性的工作。因此，使用一个自动的算法能够对图像进行色彩和色调方面的调整可以帮助摄影师们更容易拍出好的照片。

本文重点探讨了照片的自动化处理方案，并比较分析各种方案的优劣，以及各种方案在实际情况中的应用效果。并介绍了一种结合神经网络理论，引入一个图像描述符来解释图像的语义的不仅仅依赖于图像内容的图像自动化调整算法。

**关键词**：图形处理，特征描述 ，神经网络

Abstract

In real life, the photographer can enhance the overall visual sense of beauty through his own skills, however, it is a challenging task for the average person. Therefore, using an automatic algorithm can adjust the color and tone of the image can help photographers more easily take a good picture.

This paper focuses on the automatic processing of photos, and compares the advantages and disadvantages of various schemes, and the application effect of various schemes in the actual situation. In this paper, a new method is introduced, which is based on the neural networks, and an image descriptor is introduced to explain the image's semantic.

**Keywords：**Graphics Processing, Feature Descriptors, Neural Networks