Simulating Film Stocks

Using Python

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April 27, 2024

**Abstract**

This report discusses an attempt to replicate the aesthetic of film photography. The advent of digital cameras has resulted in the accessibility of photography increasing dramatically yet many digital photographers still yearn for the distinct artifacts present in film stocks. Each film stock has a unique color profile and grain associated with it due to the nature of its manufacturing processes. We propose an easily usable program written in the Python language to allow users to easily apply film-like filters without having the need for software that is premium or complex.

## Introduction

Digital cameras are available to almost everyone in developed countries. More pictures are being taken than ever, but users are trying to replicate the look of film photography. Digital photography could be described as a clinical representation of the world. There is no “accidental” color shifting or graininess applied to the image. Despite advances in digital photography, resulting in even more accurate photos, people still edit their pictures to have visual artifacts associated with film. This is apparent with the many filters available on social media platforms like Instagram like *Grainy*, *Gritty*, and *Color Leak*. This project describes the process of attain a film look using readily available *Color Look-up Tables* (CLUTs).