WITS UNIVERSITY

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COMS4040A Assignment 2 – Report

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1 Introduction

Discrete Image Convolution is a widely used technique in digital image and signal processing. It can achieve a huge variety of effects, from blurring and sharpening to edge detection and noise removal.
Consider a discrete image $I \in \mathbb{R}^{M \times N}$ where each $Y(i, j) \in [0, 1]$. Consider also a discrete filter $K \in \mathbb{R}^{F \times F}$. Then the discrete convolution of I by K is defined as:

2 Empirical Analysis

3 Summary

References