## ABSTRACT

Along with the rapid development of information technology. Technological developments in the field of Android-based smartphones are now increasing in demand by people from all levels of society. Android is a smartphone operating system which is very useful in facilitating various activities. One of which in the field of photography. Android based phones are able to produce a pretty good picture, especially if supported by using image processing application to give a unique feel of an effect. One of such effect that can be used is non-photorealistic rendering. Non-photorealistic Rendering (NPR) is a technique to manipulate realist images into a nonrealist image to give it an artistic impression. One form of NPR is artistic rendering which also called painterly rendering. One of the painting media simulated including the effects of watercolor.

With an intent to combining the expressivity and thr beauty of an images of natural media with the flexibility and speed of computer graphics, a watercolor image filtering effect is made on application jepret that are used for Android-based smartphones. Watercolor image filter is one of the very interesting filters, which is very performance hungry. Parameters configuration will be performed to achieve the desired watercolor effect.

From the test result show that result images express a lesser degree of image detail when compared to source/input images. This filter also tends to output images which appear to have smaller colour ranges from input images. The application can perform all functions and features as expected. The application also help users take the image with Watercolor effects

*Keywords* : *Mobile Application, Android, Photography, Image filter, Nonphotorealistic Rendering, Watercolor*