

## ABSTRACT

Along with improvement in technology and information that is evolve very rapidly. Also technology developments in Android-based smartphones nowadays more advanced and attracted many people. Android is a smartphone operating system that is currently capable of facilitating various activities. Included are areas of photography because many smartphones are equipped with high-megapixel camera and image editing applications to give effect for unique color. One of the effects is Cross Processing (Xpro). Xpro is a conventional technique for developing analog film deliberately swapping of chemicals that should be used for negative film with chemicals to positive slide film and vice versa <sup>[8]</sup>. So that will be generated to shift the colors that are not natural and increased contrast and saturation <sup>[2]</sup>.

With the aim of combining the unique color obtained Xpro techniques with the flexibility and speed of computer graphics, so we made a cross process image editing effects in photography applications used for Android-based smartphones. Cross Process filter is one filter that is extremely attractive in producing color. To obtain the expected effect of cross process parameter settings-parameter performed on the filter.

From the test results of this application can run all the functions and features as expected. To produce the cross filter process quickly less than 5 seconds, the user needs to use the device with a minimum of 1.2GHz processor and 1GB of RAM. The resulting color of the cross process filter tends to resemble the results of developing film with cross processing techniques (Xpro).

**Keyword:** mobile application, image filter, cross process