

Smartphone Photography and the Application and Exploration of Various Apps in Portrait Photography: Post-Print Version

Authors: Li Li, Tian Hui

Date: 2023-10-08T00:00:00+00:00

Abstract

In the mobile internet era, the synergy between smartphone cameras and photo post-processing applications has rendered mobile photography increasingly professional and powerful. Not only are a growing number of ordinary individuals utilizing mobile phones to document their lives, but an increasing proportion of professional portrait photographers have also embraced the more portable smartphone for portrait sessions. In everyday life, the integration of smartphone portrait photography with post-processing via photography applications enables the rapid presentation of superior visual effects and facilitates online dissemination.

Full Text

Preamble

Mobile Photography and the Application and Exploration of Various Apps in Portrait Shooting

Abstract: In the mobile internet era, mobile phone cameras combined with photography post-processing apps have made mobile photography increasingly professional and powerful. Not only are more ordinary people using phones to record life, but more professional portrait photographers are also choosing the more portable mobile phone for portrait photography. In daily life, combining mobile portrait shooting with post-processing through photography apps can quickly achieve good visual effects and enable online dissemination.

Keywords: mobile photography; software applications; portrait shooting

Authors: Li Li, Tian Hui
(*Shangrao Normal University*)

1. Selection and Application of Mobile Apps in Pre-Portrait Shooting Preparation

Whether employing professional DSLR cameras or convenient mobile phones, adequate preparation is indispensable for portrait photography. Different thematic shoots require appropriate scenes, and environmental atmosphere and lighting are also key factors determining exposure. With sufficient preliminary preparation, mobile phones can be utilized as a tool to capture portrait photography and achieve envisioned perfect images.

During shooting, using correct focusing methods can achieve background blur effects, making the composition more concise. By positioning the subject farther from the background and setting the focus point on the person's face using the phone's native camera, the background can be blurred. This approach highlights the model from the background without requiring other elements to be removed from the frame. This function proves particularly useful when photographing subjects with varying postures.

3. Reference and Application of Auxiliary Line Functions in Portrait Shooting Composition

Modern smartphones are generally equipped with autofocus functionality—tapping the screen or half-pressing the shutter button enables automatic focusing and better locks onto the shooting target. When opening the phone's camera, a small sun-shaped symbol next to the focus box serves as the manual exposure adjustment indicator. After fixing the focus point, exposure can be manually adjusted by swiping up or down according to light intensity. In addition to manual adjustment, the native camera features a hidden skill (as shown in Figure 1 [Figure 1: see original paper]): locking focus and exposure. This requires long-pressing the position where the focus point needs to be fixed, then manually adjusting exposure using the aforementioned method to lock both focus position and exposure.

With the rapid development of mobile photography apps, using the built-in camera in VSCO software can also achieve automatic metering. After opening the VSCO camera interface, lightly touching the screen enables automatic metering and focusing based on changes in environmental lighting.

Portrait photography involves not only emotional expression but also the selection of composition and lighting. In the specific process of mobile portrait photography, grid lines can be displayed in the lens frame by adjusting the phone's camera settings, as shown in Figure 2 [Figure 2: see original paper] (left), which can assist composition. The default image shooting ratios for mobile phones are 4:3 and 1:1. Additionally, we can select apps to adjust the viewfinder ratio as needed, such as the commonly used Beauty Camera, where the built-in camera

can also be adjusted to full-screen mode. Beyond controlling the overall picture ratio, composition can also be used to change perspective variations, which is another commonly employed shooting technique. Rule of thirds composition and diagonal composition are both frequently used composition methods in portrait photography. Rule of thirds composition is a very simple and practical approach, as shown in Figure 2 (right), where the subject is positioned at the intersection of two lines.

4.1 Introduction to Portrait Retouching Apps

For portrait retouching, mobile apps offer numerous options, several of which are easy to operate and popular among the public, such as Meitu Xiuxiu, Face-tune, etc. (Figure 3 [Figure 3: see original paper]). Meitu Xiuxiu's functions—including portrait beauty enhancement, text templates, smart borders, and free collage—allow users to process portrait photos within a short time. Therefore, when using Meitu Xiuxiu for daily post-processing, its basic portrait retouching functions are simple and convenient, helping to convey a unique understanding of human beauty from subjective perception.

There are, of course, more apps worth exploring, such as Darkr, which focuses on large-format camera and darkroom effects; the Nongyou camera filter that mimics film effects; and even the mobile professional editing app Lightroom. These post-processing software programs can bring endless possibilities to our mobile portrait post-processing effects.

4.3 Effective Utilization of Mobile Collage Apps for Portrait Photo Layout Distribution

The requirements for online dissemination of portrait images differ from those for traditional photographs. Social media platforms prioritize network dissemination speed and browsing efficiency. To aggregate large amounts of information within a short time and quickly capture users' attention, portrait photos can be published online through uniquely arranged collage layouts, ultimately achieving electronic and lightweight dissemination.

Portrait photo collage layouts in network dissemination require novel and fashionable layout designs. The Pinlde APP's functions are primarily divided into magazine collage and modern collage, supporting collages ranging from single to twelve photos. As a collage software, "Pinlde" offers extremely rich and aesthetically pleasing collage templates for portrait photos. The greatest advantage of the collage app Layout is its editable images, which can recombine portrait photos to create unique layouts. Layout's photo processing is smooth and intuitive—tapping can generate image mirroring, flipping, or replacement; holding and dragging can swap images; pinching can zoom; pulling handles can adjust photo dimensions. The application of this APP's photo processing methods in portrait photo collages is both convenient and rich, meeting the basic needs of contemporary e-commerce and influencer promotion. Compared to

other collage apps, Changtu can add any number of photos and export them in original size without loss of portrait photo quality. It also has no watermark when used, with rich functions and a very comfortable user experience. Among them, seamless collage is widely used in social networks and e-commerce media, and the spacing width can be set, with rotation for horizontal splicing. Holding a single photo allows moving and cropping to create subtitle splicing, while also enabling text editing. It is a collage APP that can ensure portrait image quality without limiting the number of collages (Figure 5 [Figure 5: see original paper]).

4.2 Application of Apps for Adjusting Color and Atmosphere Effects in Portrait Photos

After completing portrait photography, we typically adjust photos for color, atmosphere, and storyline creation. The operation that can best enhance subjective emotion in post-processing is filter addition. VSCO, a currently very popular photography APP, is a software focusing on rich analog film effects, maintaining simple usage in its filter function. During post-processing, VSCO's numerous film filters and basic photo adjustment tools can be used to process photos, creating captivating mobile photography works full of film flavor.

In VSCO filters, the A1-A10 series more closely simulates real film colors, with good performance in both color cast and details. In portrait photo adjustment, A6's biggest feature is enhancing contrast and importantly highlighting fair skin with very natural effects. The B1-B6 series are standalone VSCO black-and-white filters and the most commonly used black-and-white filters, covering almost most black-and-white tones. As shown in Figure 4 [Figure 4: see original paper], whether high-contrast black-and-white or faded classic black-and-white can be expressed in this series. The characteristics of black-and-white tonality itself make this filter series very suitable for highlighting character and enhancing atmosphere in portrait photography.

Snapseed has powerful functions for delicate photo adjustment and rich post-portrait processing. Compared to VSCO, Snapseed can combine different filters and record them in a non-destructive operation flow. This software's black-and-white filter also better conforms to the daily so-called black-and-white portrait style. It is worth mentioning that Snapseed's unique application of lens flare and double exposure in portrait photography can create dreamy and magical colors for portraits, merging two different elements—people and scenery. Portrait works will express deeper artistic qualities.

Of course, there are more apps worth exploring, such as SKRWT, which focuses on adjusting picture perspective structure, or apps focusing on large-format cameras and medium-format cameras.

Conclusion

As one of the communication media in the self-media era, mobile portrait photography can instantly transmit large amounts of personal life information on various social media platforms, which cannot be separated from precise operation and processing of post-processing apps. Effective use of mobile phones and cultivating good photography composition ability are important prerequisites for shooting portrait photos. Combined with various apps for post-processing mobile portrait photos, this helps form a good dissemination model that is accepted by the public and enables information sharing in daily life.

References

- [1] Yang Jinsheng. Journal Article: A Brief Discussion on Lighting Techniques in Portrait Photography[J]. Youth Years, 2015

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.