

PictureComposer Project Summary

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Photography is nearly ubiquitous in the modern world. With the prevalence of smartphone cameras, taking a photo is more accessible than ever before- be it of your pet, a picturesque view, or even yourself. As such, we take millions of pictures globally each day and upload over a billion to social media platforms¹.

Photo sharing applications like Instagram and Flickr allow users to share their shots with a potentially vast audience. These platforms host a variety of creators, from hobbyists to world-renowned photographers, like Annie Leibovitz. Furthermore, they serve as a portfolio for both emerging and experienced photographers to showcase work and connect with clients.

PictureComposer aims to help photographers of all skill levels take better photos that attract attention. Leveraging data from photo sharing platforms and the principles of photography, we plan to develop a mobile application where users can upload a photo and receive tailored advice on improving image composition, allowing anyone to take visually appealing, professional quality photos. We intend to offer the following features:

Photo Grading: An uploaded image will receive a letter grade for composition. A grade breakdown will be presented, enabling the user to review opportunities for improvement, as well as the strengths of their photo. The breakdown will provide specific recommendations for adjusting composition- for example, positioning the subject matter to the left rather than the center, or zooming in on the subject so it occupies a greater portion of the image.

Similar Images: Our application will curate three (3) popular images of a similar subject for the user to review. The user may view the suggested images' performance on Flickr, including ratings and comments. This feature will allow for valuable comparison between the user's own photo and highly successful photos of the same or similar subject, providing both inspiration and a guide for future pictures.

Performance Prediction: Given that social media is a primary avenue for advancement within the photography industry, building a successful Instagram account can be key for professional growth. Receiving high engagement on posts is paramount for reaching a wider audience and potential clients. However, it can be difficult to predict which photos will perform well. In fact, a simple web search reveals millions of results claiming to boost engagement with unsubstantiated tips and tricks. We intend to offer a data driven solution that will predict the performance of a photo and provide valuable insight for users working to boost their social media presence.

¹ Mary Meeker, "Internet Trends 2014 – Code Conference," KPCB (Presentation, Re/Code Code Conference, Rancho Palos Verdes, CA, May 27, 2014).