

# CRED: A Corneal Reflection and Environment Dataset

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## APPENDIX

Fig. 1 is the samples of image displayed on the screen. The iris colors of the volunteers are mostly brown and sepia, and we choose the bright and high-contrast scene images to ensure the separate performance of the CIs from the iris interference.

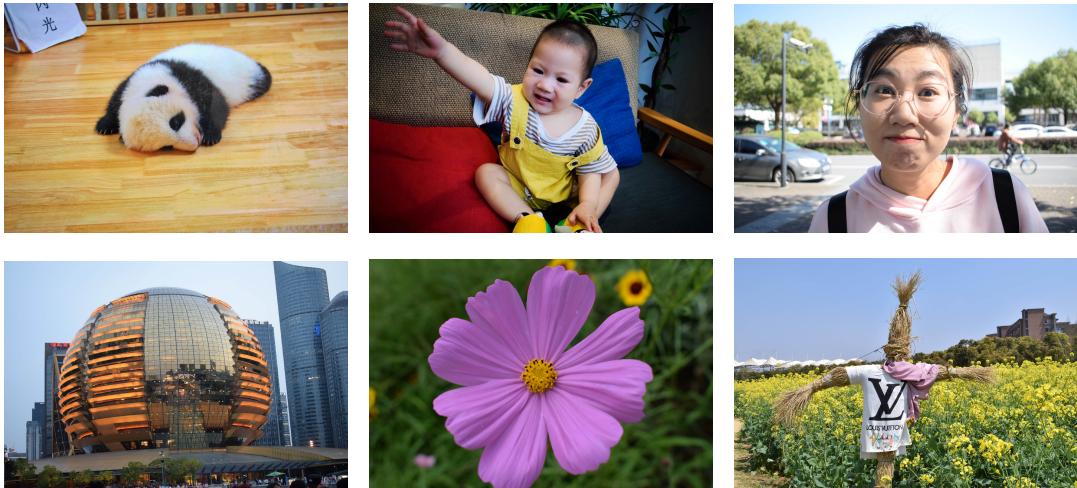


Fig. 1: Examples of  $B_s$

Eye images and labeling results of four subjects of different ages and genders are selected as examples for data presentation. Table I shows the data when facing different scene images, and Table II shows the data when facing the same scene images. We can see that when the iris texture and color are obvious, the CIs are seriously disturbed by the iris, and the iris texture and color in it are difficult to be completely removed by the algorithm. In addition, due to the complexity of the CIS, when the height and body shape of the subject and the reflectance ability of the tear film are different, the clarity and resolution of the CIs also have obvious differences. We believe that these differences are very useful and belong to an important part of data diversity, and therefore we do not wish to obtain CIs that are as identical as possible through stricter restrictions.

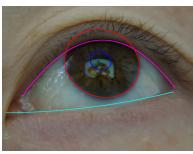
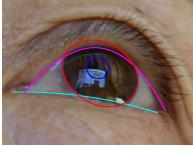
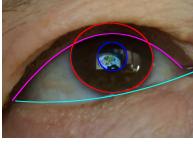
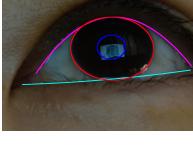
$I_s$	$I_o$	$I_c$	$I_r$	$P_o$	$R_g$
					
					
					
					

TABLE I: Data presentation of subjects facing different scenes

$I_o$	$I_c$	$I_r$	$P_o$	$R_g$

TABLE II: Data presentation of subjects facing the same scene