



**CALIFORNIA STATE SCIENCE FAIR  
2017 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Alexa R. Duran</b>  | <b>Project Number</b><br><b>J0406</b> |
| <b>Project Title</b><br><b>Identifying Emotions: Investigating if People Can Determine Someone's Emotional State from Facial Expressions</b>   |                                       |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>The objective of this study is to determine whether humans can accurately identify other's happy or sad emotions purely through facial expressions.</p> <p><b>Methods/Materials</b><br/>Camera, 10 original test subjects, 20 test subjects, pencils, pictures of people/objects/animals, Ipad/Computer and survey. Took pictures of 10 subjects expressing emotions and showed those pictures to 20 subjects responding to a survey.</p> <p><b>Results</b><br/>Subjects identified the emotion they believed was being expressed from viewing pictures of people by marking responses on a written survey. Most subjects were able to accurately identify happy emotions but sad emotions were more difficult to identify.</p> <p><b>Conclusions/Discussion</b><br/>Survey results indicated a difference among the accuracy rate of identifying happy, sad and other emotions. Suggesting that facial expressions may be insufficient to identify sad and other emotions. It is concluded that happy facial expressions can be identified more accurately but sad facial expressions are more difficult to identify due to sharing facial characteristics with various emotions.</p> |                                       |
| <b>Summary Statement</b><br>I found that happy emotions were accurately identified by viewing pictures of facial expressions while sad emotions were misidentified and confused with other emotions.   |                                       |
| <b>Help Received</b><br>Mr. Gong the Science Fair Coordinator helped me design my project. Mrs. Wright my science teacher helped me coordinate my subjects and secure the human subject release forms. I conducted the experiment myself.  |                                       |