



**CALIFORNIA STATE SCIENCE FAIR  
2017 PROJECT SUMMARY**

<b>Name(s)</b> Andrew Qin	<b>Project Number</b> <b>J0717</b>
<b>Project Title</b> <b>Determinants of a Font's Readability</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> This project is concerned with an experimental study of how certain characteristics of fonts affect their ability to be read, specifically thickness and the inclusion of brackets.</p> <p><b>Methods/Materials</b> I printed out two pages of text with each page a different font. To test this, I assigned groups to read both pages Arial, first page Arial second page Georgia, etc. until all combinations with Arial and another font of Georgia, San Francisco, and Times New Roman have been read. I timed each page separately and analyzed the data through the ratio of the times of the pages, so the speed of their reading didn't affect the results.</p> <p><b>Results</b> I analyzed times using both pages having the group reading both Arial pages as a control, and found that the average in each category was: Arial-Arial = 1.113, Arial-Georgia = 1.124, Arial-San Francisco = 1.257, Arial-Times New Roman = 1.05 for Arial being the first page, and in the same order for Arial being the second page: 0.844, 0.868, 0.976, 0.83.</p> <p><b>Conclusions/Discussion</b> These results show that San Francisco, the thick font without brackets, was the easiest to read. Arial, a medium thickness un-bracketed font, and Georgia, a thin bracketed font, were about equal. Times New Roman, a thin bracketed font, was the slowest.</p>	
<b>Summary Statement</b> I showed that fonts that are thicker and have bracketed letters are easier to read than those who do not have these characteristics.	
<b>Help Received</b> I received help in getting literature resources from Professor Kimin Eom in the Psychology Department from UCSB.	