



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY**

Name(s) Samik Pattanayak	Project Number J1316
Project Title Does Screen Time before Bedtime Impinge the Quality of Your Sleep?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this project is to see if the use of electronic devices before bed affects the quality of your sleep. I also hope to find an amount of time you can use electronic devices before bed without affecting your sleep quality drastically.</p> <p>Methods/Materials I used human participants, sleep-tracking devices and the apps for these devices. The participants used devices for a specific amount of time before bed and wore the sleep-tracking devices to bed, which recorded their sleep pattern.</p> <p>Results The sleep patterns of several participants were recorded and I noted that quality of their sleep was affected by the use of electronics before bed. I found that 60% of the participants slept best when they did not use electronic devices before bed. Also 80% of them met the sleep requirements, when not using electronics before bed.</p> <p>Conclusions/Discussion The use of electronics does affect your sleep but affects kids more than adults. I found that for kids you can use devices for under thirty minutes without affecting your sleep drastically and for adults you have to find how well you sleep personally and set a limit. It is concluded that it is always best not to use electronic devices before bed.</p>	
Summary Statement I recorded the sleep patterns of human participants and found that the use of electronic devices before bed affects quality of your sleep.	
Help Received I conducted the experiment myself. I was helped by my teacher in reviewing the presentation.	