



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Zachary J. Becker	Project Number J0304
Project Title Constructing a 3D Printer from Scratch	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective is to construct a working 3D printer without using a pre-assembled kit.</p> <p>Methods/Materials 3D Printer assembled from parts from multiple sources, including homemade. Laptop, Repetier-Host and Repetier-Firmware, freeware 3D printer software developed by Repetier.</p> <p>Results I was successfully able to construct and program a 3D printer constructed fully from scratch.</p> <p>Conclusions/Discussion I realized that it is fully possible for someone my age to assemble complex systems. However, there are also many improvements that I would make if the experiment were done again.</p>	
Summary Statement 3D printer constructed entirely from scratch.	
Help Received My father helped me to cut the wood and metal rods, and taught me how to solder. Various users of the #Reprap Freenode IRC Chatroom, helped me to program the 3D printer.	