# CALIFORNIA STATE SCIENCE FAIR
# 2016 PROJECT SUMMARY

**Name(s)**

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**Project Number**

36632

**Project Title**

## Constructing a 3D Printer from Scratch

**Abstract**

**Objectives/Goals**

My objective is to construct a working 3D printer without using a pre-assembled kit.

**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.

**Results**

I was successfully able to construct and program a 3D printer constructed fully from scratch.

**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.

**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.

Preliminary