



## Trial and Error Adjusting to the MakerSpace

Nate Barone, a freshman, has spent quite a bit of time using one of the Makerspace's 3D printers to create car parts, something he can make use of in his garage at home. Nate, as well as the other interns at the Makerspace, are familiar with CAD programs which means computer-aided design.

One particular example of trial and error Nate had faced involved figuring out which CAD program worked best for his design. He found that TinkerCAD was missing the tools he needed to create an accurate design, "Thanks to the new MakerSpace technician, Mike, I was able to download a better CAD software which has now made making parts easier, after getting over the software's learning curve."



Freshmen Nate Barone discussing his work with Professor Kaya



Stephen Bader using the electronics room using motors



In the electronics room you will find freshmen Stephen Bader and Henry Sinclair, both Engineering students. Stephen has utilized the 3D printer to create battery casings for a motor to be used in the rube goldberg machine, a group effort which is projected to be completed by the beginning of fall semester. Controlling voltage output within his motors proved to be the struggle Stephen dealt with most, "this has caused the frying of many resistors and diodes." Now, he looks forward to doing more work with solar power and attempting to create an electric longboard. Henry Sinclair also added his own personal touch to our makerspace by completing an 8-bit single chip computer. He made use of our Arduino boards and an antique television to get the screen to display words -- a proven success.





Something fun? The MakerSpace has a space for even more creativity, a crafts room. Freshman and Computer Science major Angelica Galati frequents the craft room almost every time she is at the Maker-Space. One project was making kites and comparing her designs with commercially made ones. This task was not as simple as you may guess, "I had to figure out how to keep the kite light, while giving it support at the same time." Angelica has also attempted using motors for her ferris wheel (pictured) as well as sensors in the electronics room. You are sure to find her painting and finishing her designs after they are completed. She is looking forward to making a grandfather clock to be displayed in the Make-Space.



Angelica Galati finishing her ferris wheel

## Looking Forward

### Rube Goldberg Machine

Gabe Bitencourt, a freshmen student, is another driving force in the MakerSpace. The Rube Goldberg Machine is Gabe's main focus, along with the other students. "The whole process has been slow but successful, although there have been many failures." The pulley system concept is something he had been working on for two full days with Lucinda Cahill, another freshman in the Engineering program - he just found a way to make it work - sort of. A majority of Engineering involves making mistakes and then finding solutions, something everyone also experiences here at the MakerSpace.



Gabe Bitencourt working on this Rube Goldberg part.



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Editor: Gabriella Rufa  
Contributors: Nate Barone, Gabe Bitencourt, Stephen Bader, Henry Sinclair, Angelica Galati, Lucinda Cahill, Mike Altis.  
Contact info: Professor Tolga Kaya  
(kayat@sacredheart.edu)

