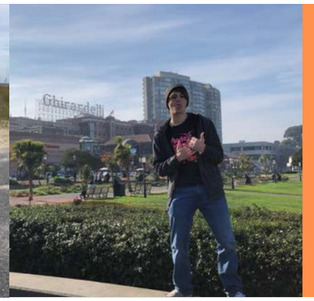
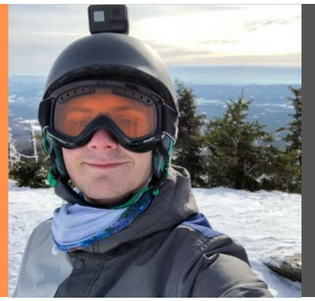


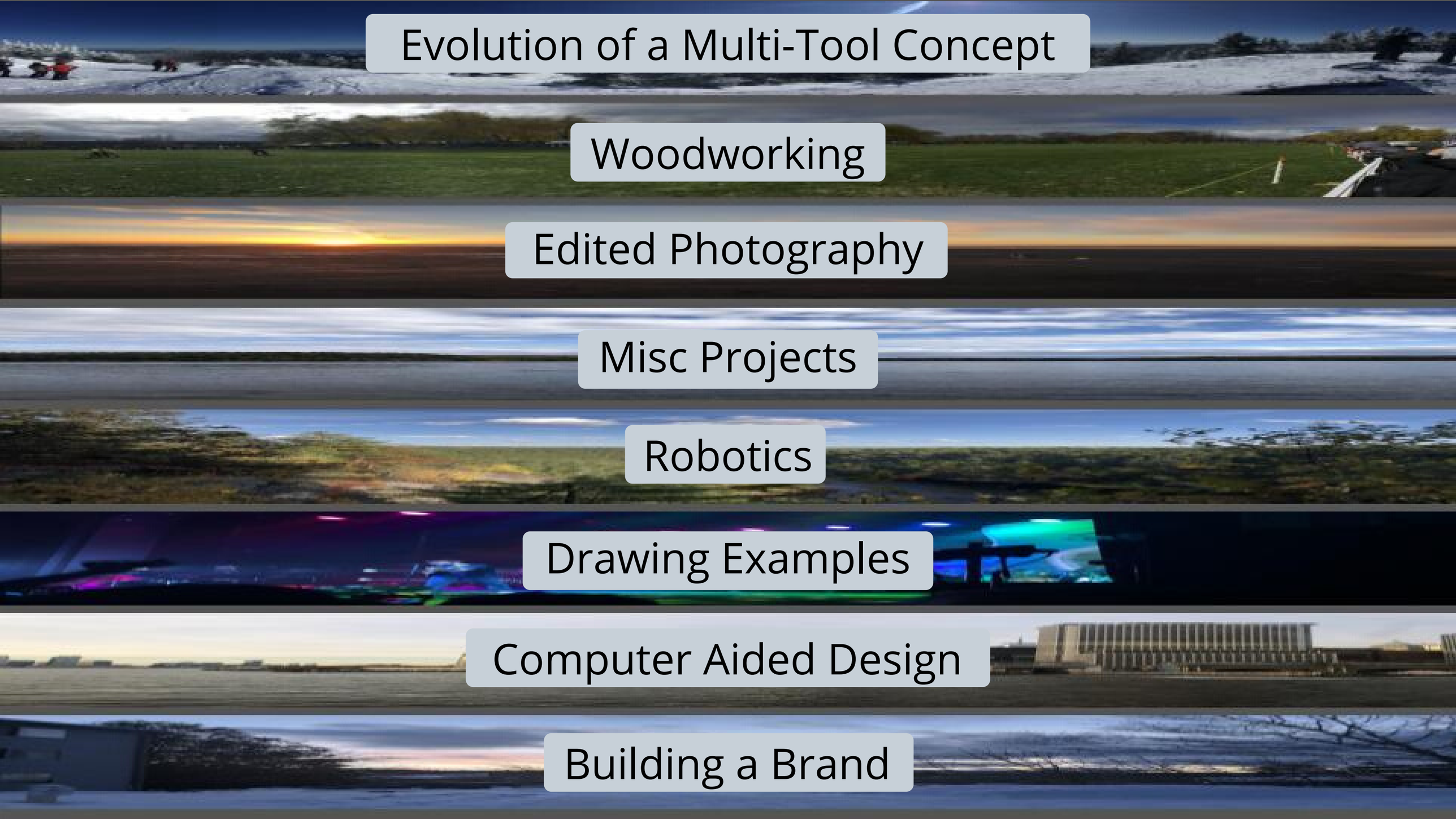






Industrial Design Portfolio

Kole Tromp


Evolution of a Multi-Tool Concept
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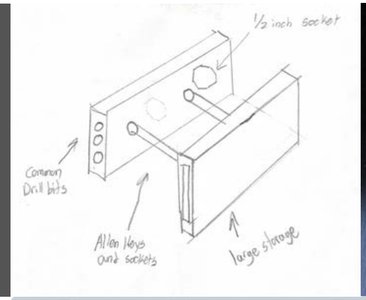
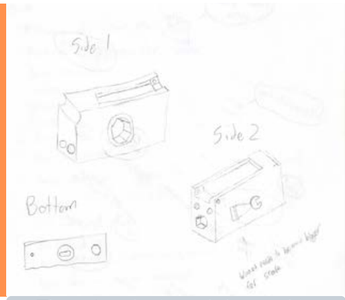
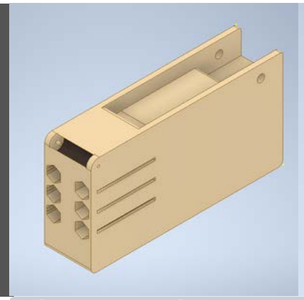
The Evolution of a Multi-Tool Concept

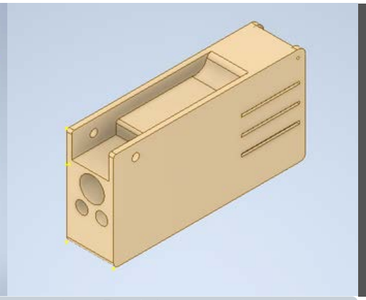


The original design concept. Testing using a crude wooden prototype showed me that the design was much too large to fit comfortably into a pocket as I intended.

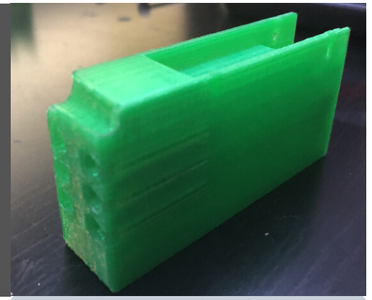


Thus, I redesigned the tool in order to be much more compact.



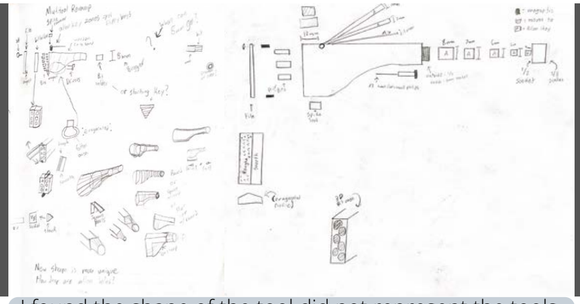


After creating a few models using AutoDesk Inventor in order to work out spacing and details I settled on this design.

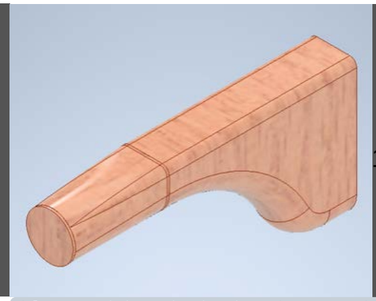


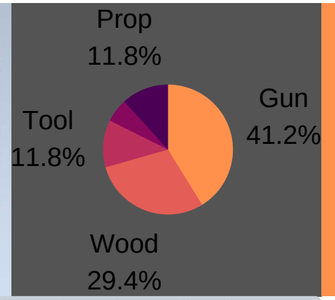
I tested the practicality of daily carry using this prototype and found it much more comfortable.

Comparing the silhouette to other multi-tools with similar purposes.

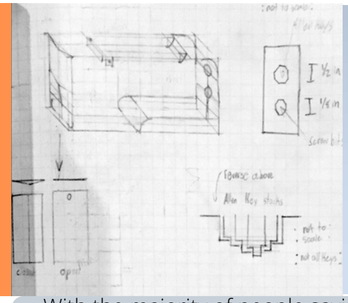


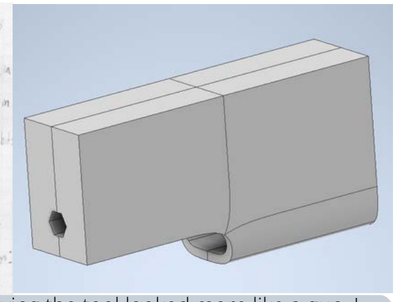
I found the shape of the tool did not represent the tools purpose and was too box-like. I redesigned the shape again to create a more unique feel.



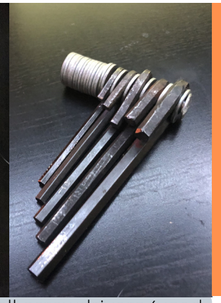


After modeling the body in Inventor I conducted a small-scale survey and asked what the shape looked like (pie chart of results provided).

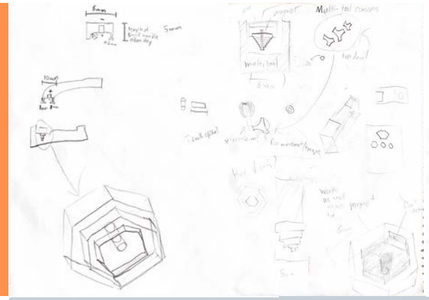


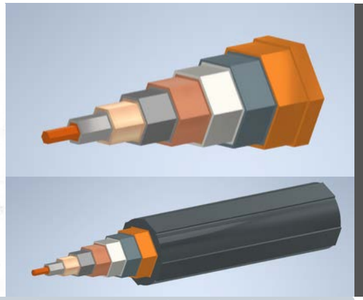


With the majority of people saying the tool looked more like a gun, I remodeled the body back to a more box-like shape and attempted to give it a more industrial style. This is where the tool is currently at.

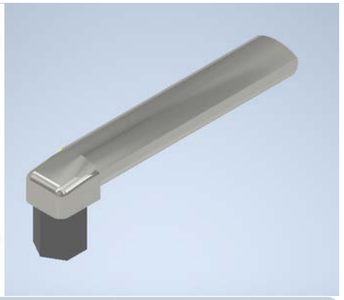


To accompany the tool, I forged two small screwdrivers (used for glasses and electronics) and a hex key set. The hex key set was much too large for use beyond the original concept.





In order to incorporate various sizes of hex keys I needed them to fit within a 1/2" socket. This led to the concept of a stacking hex key set. This is utilized in all designs past the original and has undergone many variations. The sizes are 1mm-8mm.



To aid the hex key stack's use, I designed several handles which could be used. Eventually I settled on a simplistic style with the shape reminicent of the main tool.

Sewing Supplies Case

Tool Handles for files and chisels

Hickory Ring

Cactus Vase

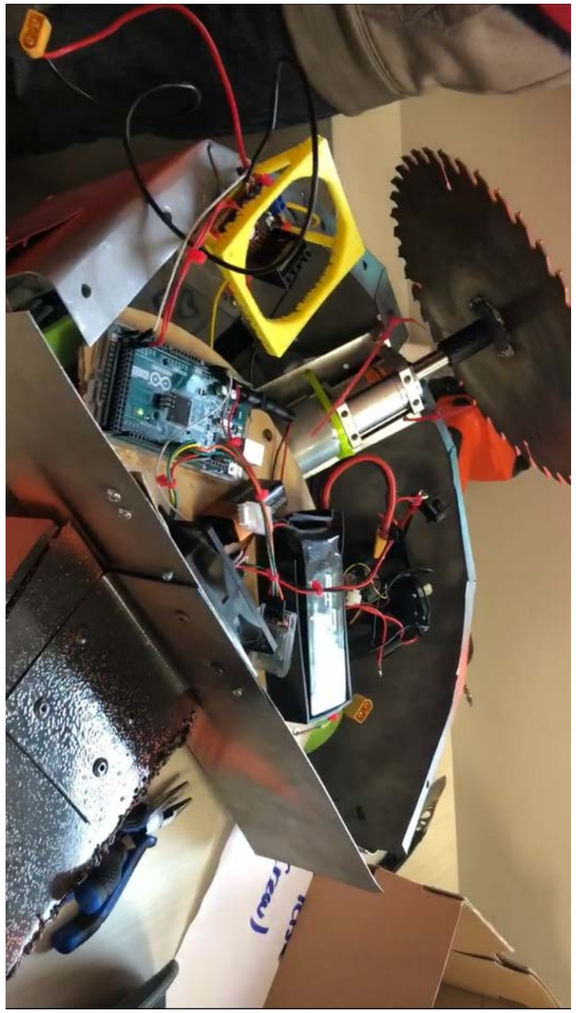
Woodworking

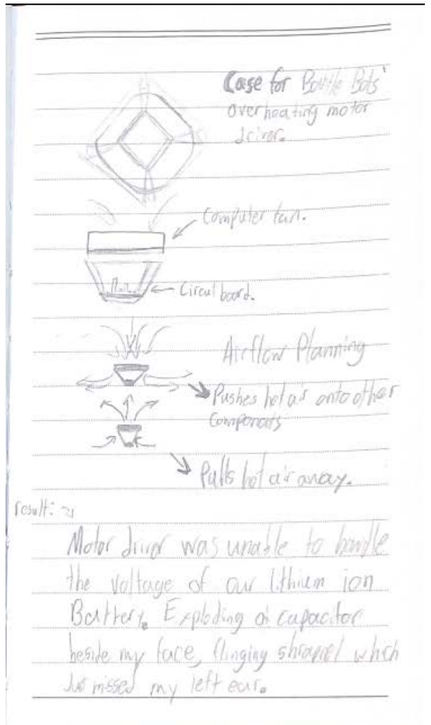
I have taken six years of woodworking and construction in my high school and middle school career. This has taught me proficiency in various tool operation including: wood planer, belt sander, wood lathe, table saw, scroll saw, miter saw, band saw, and drill press, among others.

Edited Photgraphy

Battle Bot and Motor Driver Cooler

For a school project me and a team of three others created a combat robot. It was Bluetooth controlled from a cellphone and the controls were coded by us. The project used skills including: coding, gear configurations, wiring, soldering, PCB design and creation, metalworking, wood working, 3D printing, and airflow dynamics.

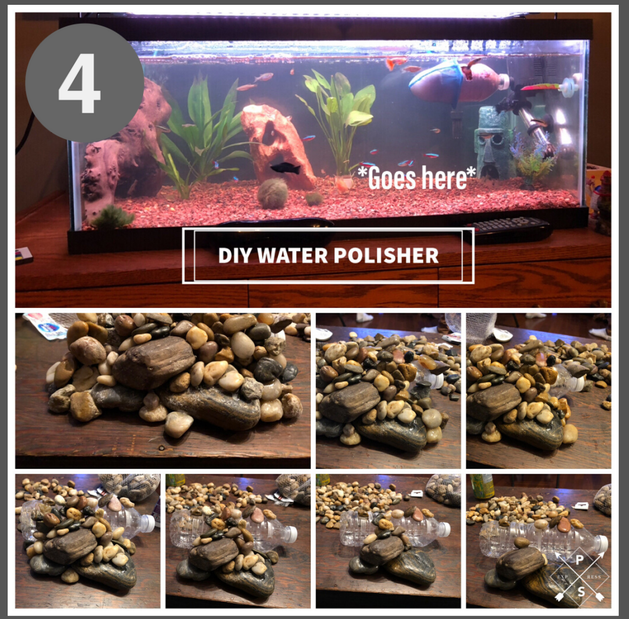




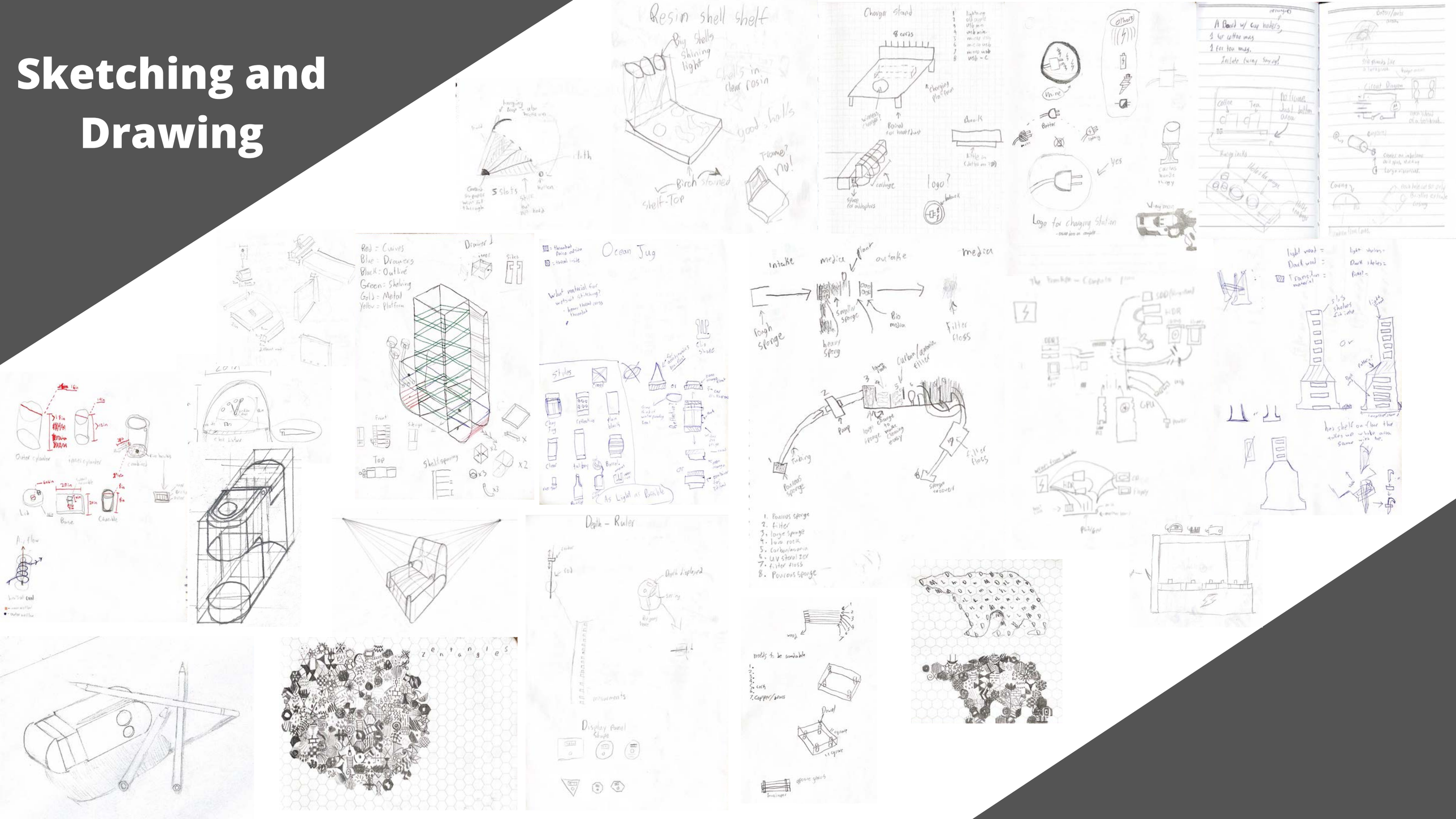
A drawing for the concept and result of the motor driver's cooling system.

Misc Projects

1. This is a functionalist computer I created using various recycled laptop, PC, and other electronic components in order to create a faster computer for use at the school. This computer was successful in being faster, and I was able to connect it to both the internet, and the school's internal servers.
2. This is a budget built fire pit I created for a friend. The total project cost less than $50. It looks nice and follows all safety regulations regarding fire pits in her region.
3. In order to learn various metal working techniques I created a small metal basketball net. This net has stood up to five years of use. I also took the opportunity to learn spray painting techniques in order to decorate the net.
4. One of my fish tanks had an issue with milky water due to various particles floating in the water. By running the water through a type of stuffing using a high powered water pump, I was able to clear up the water. This was very unsightly (as you can see in the top photo) so I created a rock cover which both disguised the system, and made it easier to swap polishing materials.



Sketching and Drawing



GuysWithLongDecks

GuysWithLongDecks (GWLD) is a board sports brand and team I created. The five of us, who make up GWLD are all passionate about skateboarding and longboarding. Originally the team was created to center around longboarding exclusively, but has since expanded into all forms of board sports. Through our focus on downhill longboarding we were able to land a sponsorship from WittleBoardz Longboarding, prototype testing for Waterborne Skateboards, along with promotional deals for Trickzpark, WildCoyoteDesigns, and Tessaway Longboards. We have also arranged promotion of small music producers including the rappers Bones, T-Beats, and BLCKK, as well as the band Hostile Mind.

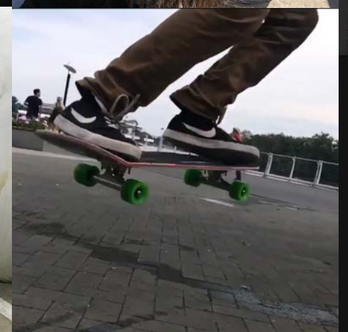
I continue to manage the team which is currently on a hiatus while we all work on our education.

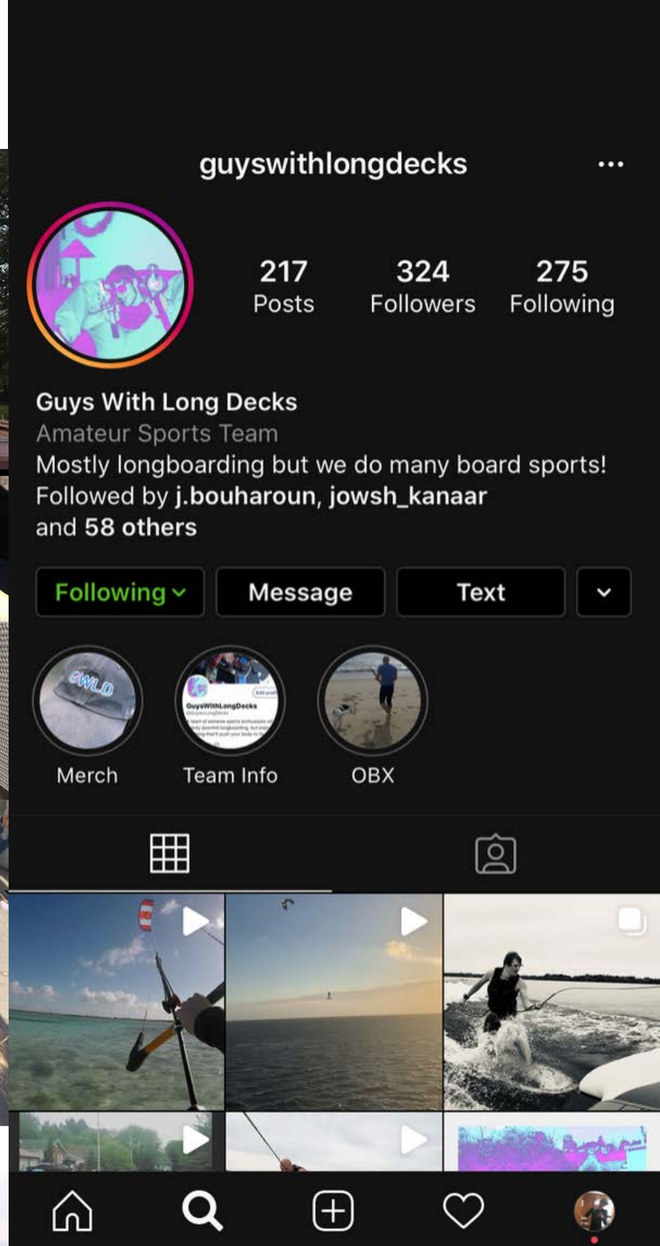








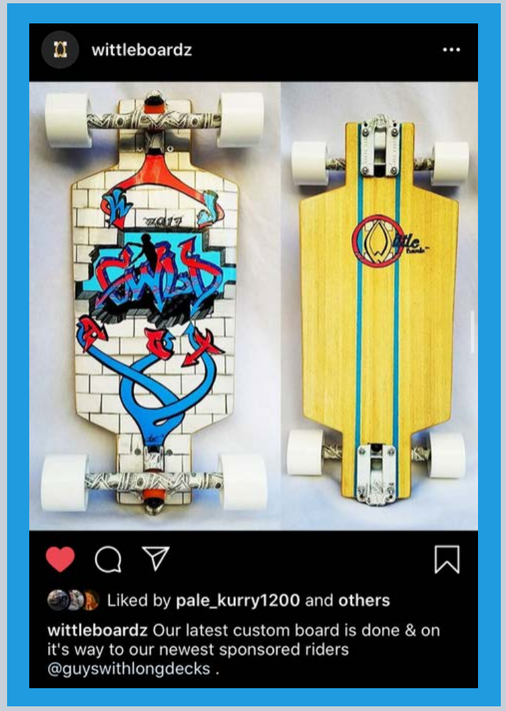




Our social media presence focuses on Instagram. We also have a smaller presence on Twitter, Facebook, and Youtube.

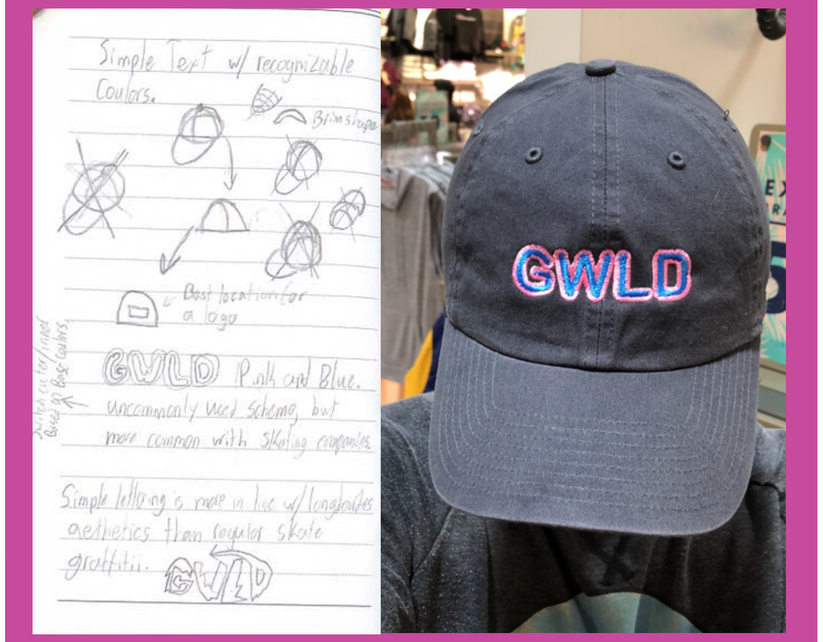
Products and Designs for GuysWithLongDecks

This longboard's shape, cut, and artwork were designed by myself and then created by Wittleboardz as a part of our sponsorship.



We designed and created stencils. Using freehand spray painting we placed our logo at local skateparks (with permission).

A handbag designed and sewn for our team.



The first product I designed was a baseball cap with a simple logo in our teams colours.

We created a style of photography utilizing our three main colours in order to make certain photos easily recognizable as our content.