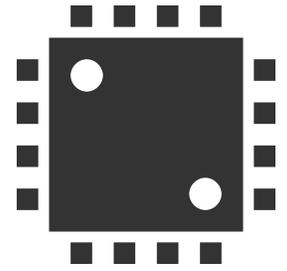




Ohm

An exploration into the future of transportation



Reflection

Overall we think that the project went pretty well. The e-bike is nearly complete with only a few bugs we need to iron out. At the end of this we will have created a surprisingly fast and powerful electric vehicle for nearly a quarter of the price if we were to buy a commercially manufactured bike with similar specs. While this is nice and all, we learned much more valuable lessons in researching, prototyping, and making an engineering idea come to life. We learned so much about electronics, and the specifics of electric drivetrains and hope that our build can serve as an inspiration to other aspiring engineers.

Importance

Should you also go out and build your own 3.5kw Ebike? For almost all people the answer is going to be no. This project took countless of hours of research, and many more hours in the workshop soldering, welding, and designing. The point of this project is to inspire. Many people often have a passion for engineering that goes undiscovered due to them not knowing where to start, or not knowing what to do. We want to serve as an example of a project where we didn't know anything about e-bikes and and electric drivetrains, but through help from the people around us and research, we were able to create something great.

Credits

A huge thanks goes out to Mr. Hunt. He walked us through almost every aspect of this project offering answers to almost all of our questions, advice, and even modeling the frame for our battery and mount for our motor. This project would have been much more difficult or even impossible without him and we thank him for that.

3d files, code, and more information about the project can be found at:
github.com/BrandonLHolland/Ohm