This is the link for the Github repository: https://github.com/rhysyim/Electronic-Speed-Controller. The current code used is /Code/Electronic_Speed_Controller_v8/Electronic_Speed_Controller_v8.ino and the schematics is /Schematics.pdf.

Current issues:

- The MOSFETs are overheating (to 150 degrees when PWM base frequency is 250000 Hz, and 80 degrees when PWM frequency is lower)
- The signals from motor are noisy
- The sequence of switching might be incorrect

Methods attempted:

- Add capacitor across each phase of motor output
- Add a low pass filter (10k Hz) before oscilloscope
- Replace the gate resistor with a wire

Possible fixes (I am not sure if these will work):

- Increase duty cycle gradually while increasing frequency in startup
- It is possible that the on-resistance is too high for MOSFET, and the capacitance might be too high