

Balancing Robots

guide for the hands-on experiences



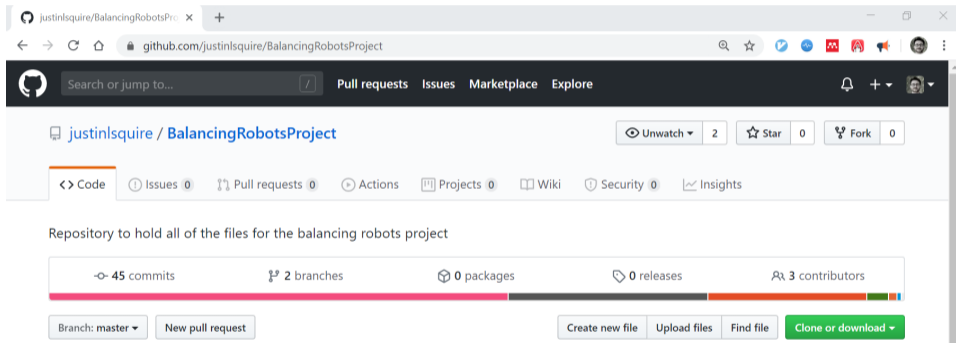
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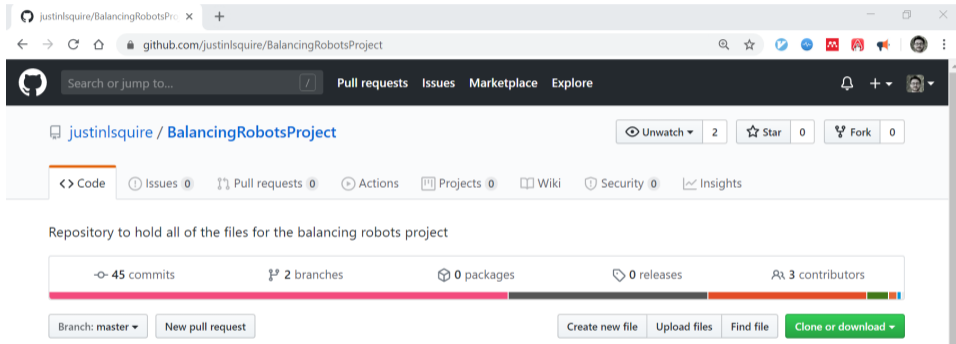
Instructions for installing the software

go to `https://github.com/justinlsquire/BalancingRobotsProject`,
it should look like this:



Instructions for installing the software

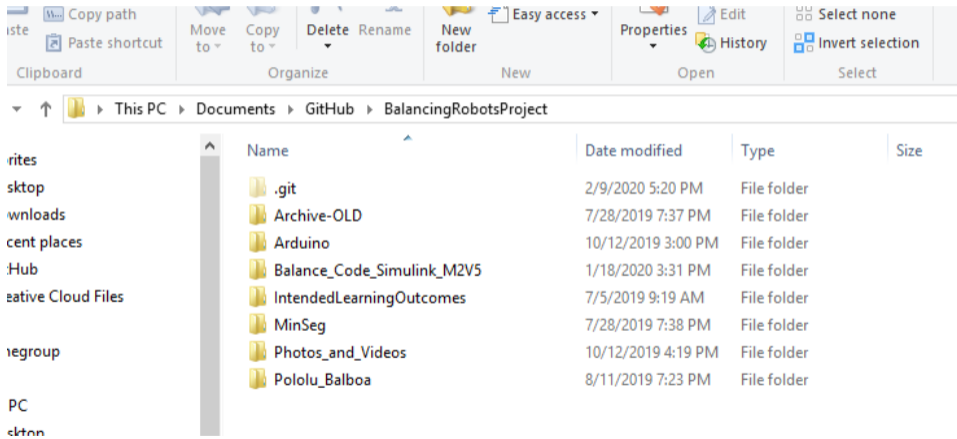
download the software by clicking the “clone or download” button:



in any folder you prefer, then unzip the downloaded file

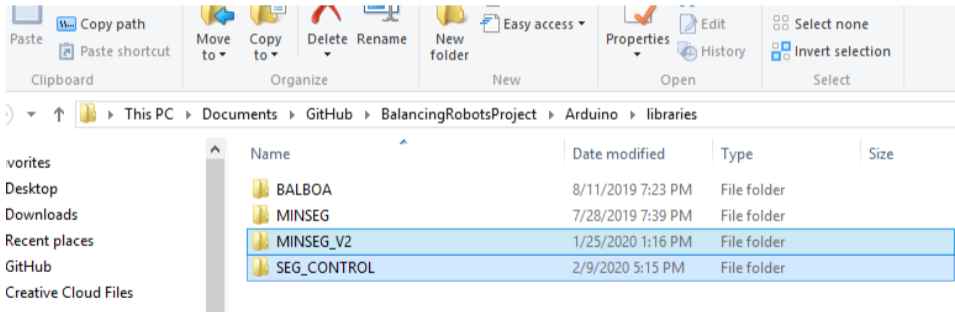
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open the unzipped file (sometimes called also “repository”) in your file explorer:



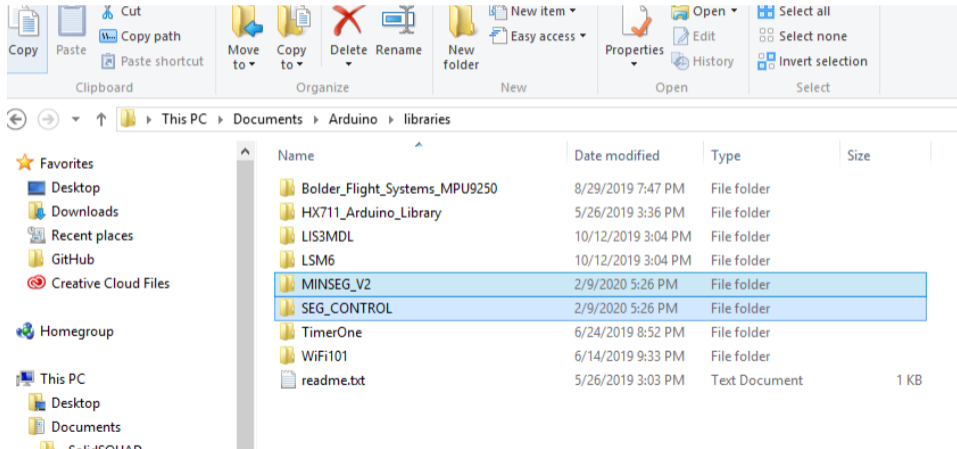
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go to the “Arduino” folder, then the “libraries” folder, then highlight and *copy* the two folders called “MINSEG_V2” and “SEG_CONTROL”:



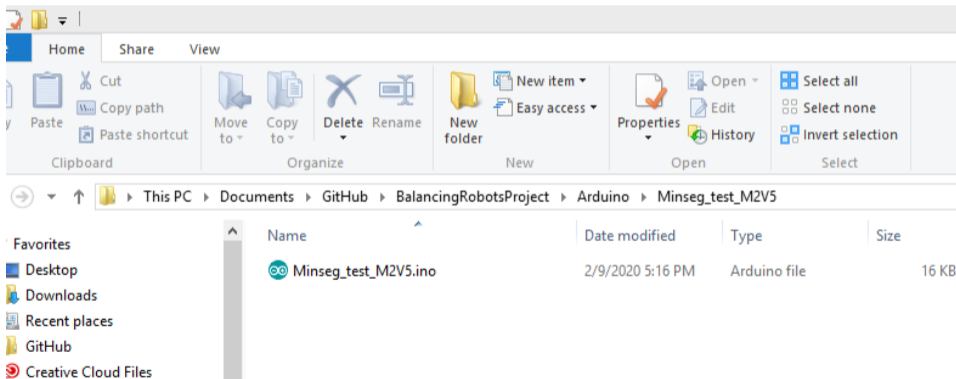
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go to your Arduino Libraries folder (note that the default location for Windows is Documents → Arduino → Libraries) and paste the two folders there



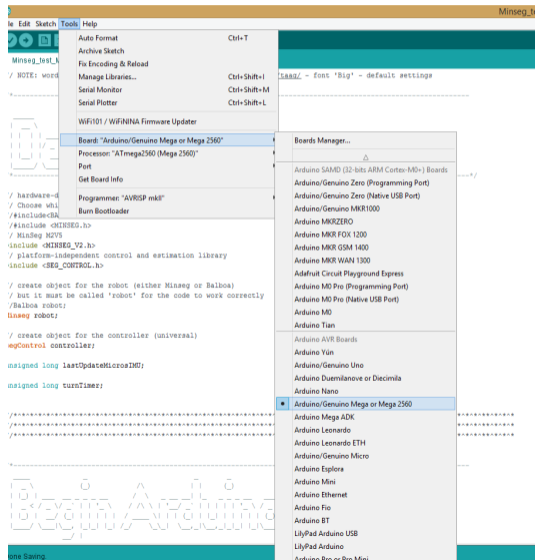
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go back to the GitHub repository folder `BalancingRobotsProject` → `Arduino` → `Minseg_test_M2V5`, and then open the “`Minseg_test_M2V5.ino`” file in Arduino



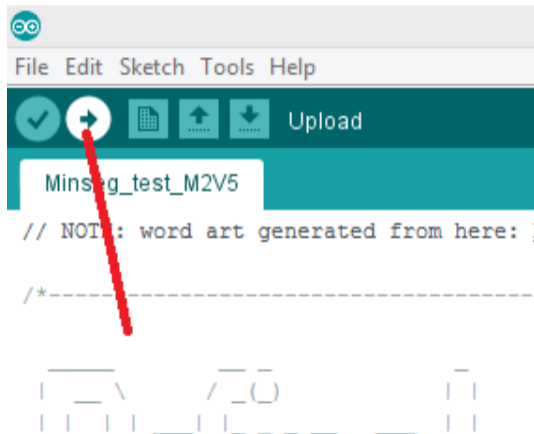
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go to Tools → Board and select “Arduino/Genuino Mega or Mega 2560”



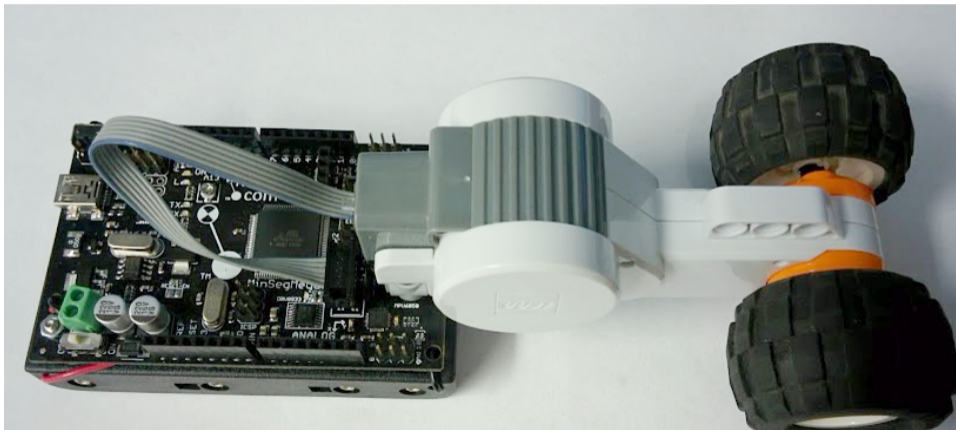
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Click the “Upload” button to load the code to the MinSeg



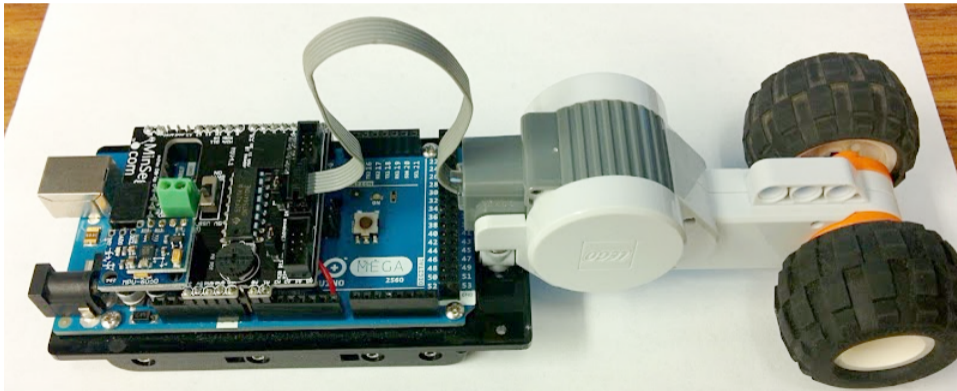
Instructions for installing the software

Check that, depending on your hardware, the connections with the motor are as in figure (1/2):



Instructions for installing the software

Check that, depending on your hardware, the connections with the motor are as in figure (2/2):



Instructions for installing the software

Hold the Robot upright and make sure the switches are set to “ON”, “BATT”, and “ON” from the top down - the robot should start balancing if everything went well!