Semester Project

ME 220 - Fall 2020

Project Topic

No project theme

You will decide on the scenario provided that:

- There is at least 1 sensor (HR-SC04, QRD1114, pot, etc.)
- There is at least 1 actuator (RC servo, dc motor)
- Application should be closed-loop: i.e. at least one sensor reading should change when one 1 or more actuators are energized by Arduino.
- Actuator is controlled based on the response from the sensor. User input is acceptable, but decision in Arduino should not only depend on this input. Arduino should use at least one more sensor to decide on how to actuate.
- Entertaining scenarios are encouraged

ESP8266 - a good project resource

If you have experience with ESP8266 (**nodeMCU** in our case), you are encouraged to make use of it.

Arduino + ESP8266

or just

ESP8266

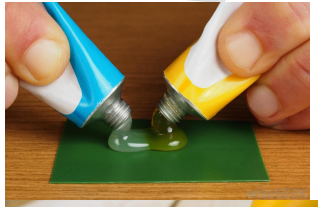
To control things over the internet... wow... wooooowww…

Same idea holds: at least 1 sensor and 1 actuator + more fun

What to use, and what NOT!

- NO machine shop tools: Turning, lathe, CNCs etc
- If available 3D printers are acceptable but it will not bring an advantage.
- New components (motors, wheels etc.) are not preferred but not restricted either.
- Salvaging broken devices / gadgets are recommended.
- Creative use of materials will be highly entertained

Good tools and materials
















What to submit? And when?

Project **presentations**: 8th of February

If you finish earlier, we can arrange a presentation.

Last day to submit **labs**: 11th of February


"That's all Folks!"
At least for 220