## ECE 476/676 - Term Project

Due Friday, December 13th
5 point bonus if presented to class during dead week
You may work individually or in groups of two

Design, program, test, and demonstrate an embedded system using a Raspberry-Pi Pico.

Your project can be anything which

- Uses a Raspberry Pi-Pico (of course),
- Programmed in Python
- And incorporates information from three or more lectures from lecture #7 onwards

note: It's perfectly OK to take an existing homework set and improve on it. You can also come up with your own design.

Term projects are due Friday at the end of the semester. If you're able and willing to present your project to the class during dead week, there's a 5-point bonus for your group. (note: sharing a video works best for this: live demos tend to take too long to set up and often times fail at the last second).

- 1) Requirements: Specify what your embedded system does including
  - Inputs
  - Outputs
  - How they relate (i.e. what it does)
- 2) Hardware Schematics (if any)
- 3) Flow chart and Python program
- 4) Validation: Collect data to verify
  - Your hardware works
  - Your software and subroutines work, and
  - Your overall system meets your design requirements
- 5) Demo
  - In-person or with a video