Project Specifications

Magnetic speedometer with display. Reads angular velocity using Hall Effect sensor, outputs data on seven-/eight- segment display.

## MUST

* Take input from sensor
* Convert analog voltage to digital data
* Calculate speed based on angular velocity, convert to mph
* Display in clearly visible way
* Low-voltage operation and small, weather-resistant package suitable for mounting e.g. on bike, skateboard

## SHOULD

* User-Parameterizable wheel diameter
* Different units (kmh, m/s, rpm, etc), selectable at run-time with some visible mode indicator.
* Resettable distance/trip monitor

## BONUS

* Phone connectivity/interfacing eg through Bluetooth or similar
* Charging capability, perhaps using solar.