

ECGR 4161 - 5/26/11

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- 1) wheels
 - 2) Legs
 - 3) fins
 - 4) Propellers (air)
 - 5) propellers (water)
 - 6) Treads
 - 7) Rocket (thrust)
 - 8) Mag-Levitation
 - 9) slither/slide
 - 10) hop/jump
 - 11) ~~Muscles~~
 - 11) Scavange
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Assignment:

Read Chapter 1 & 2

Homework 1: Identify a ~~senser~~ ^{actuator} & make a 1-minute presentation to the class on it. Make 1 powerpoint slide for this

Presentation: Due noon on 6/2 (Thurs).

- 1) Approved by me before
- 2) Identify a specific model & talk about it.
- 3) Must use template & cite all sources of photos/materials

Actuation

- propeller - Malcolm
- legs - Craig
- DC Drivetrain - Anthony
- Maglev - Ana
- Servo - Walter
- iRobot - Nan
- linear (screw) - Justin
- stepper - Nirmal
- Hydraulic - skelwick
- MEMS - Brandon
- pneumatic - Ganya
- Tractron - Samir

Sensor

Malcolm - Connect

Brandon - CMOS active pixel sensor

Craig - Hall effect

Anthony - Gyro

Anna - Touch ~~Capacitive~~ Pressure

Walter - Temp

Nan - GPS

Justin - Reed switch

Nirvanal - Accelerometer

Skelwick - Sonar

Genya - Strainometer

Samir - Lidar