EN1-06: Simple Robotics

September 23rd, 2016

Schedule

- Upcoming Schedule: this Friday, next Friday
- Visitor
- In the News
- Partner Survey Reminder
- Office Hours
- Assignment 2: Sensor Investigations
- Hands-on Activity

Visitor: Andrew King

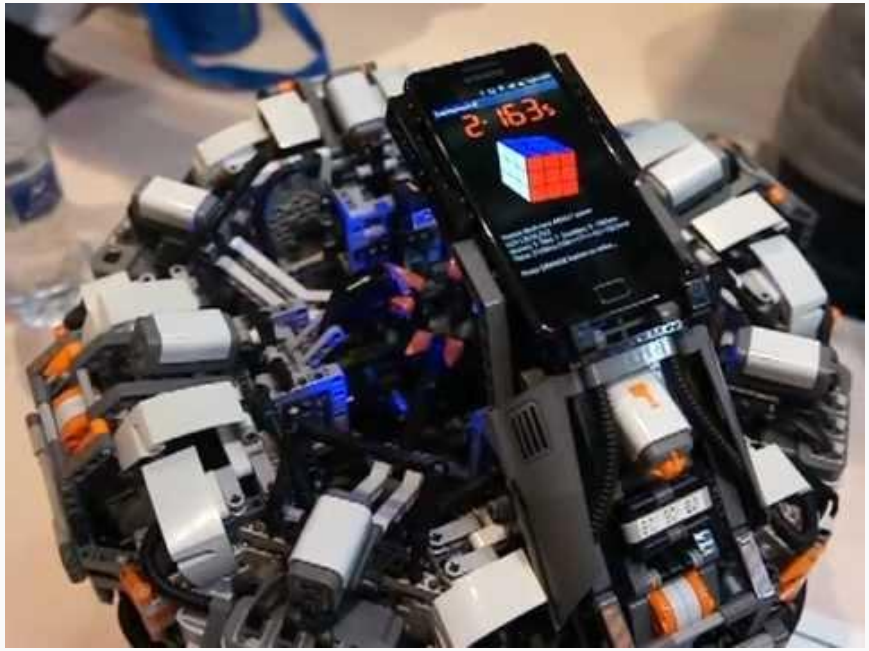
Andrew King

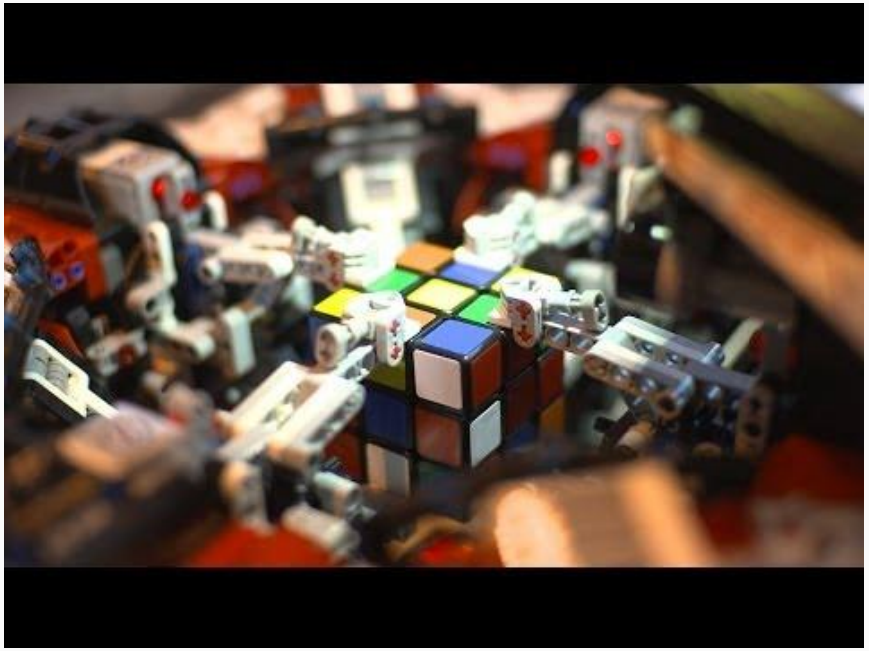
Digital Marketing Coordinator

LEGO Education, Digital Marketing

In the News

LEGO MINDSTORMS Rubik's Cube Solvers





https://www.youtube.com/watch?v=staapsj3eRQ https://www.youtube.com/watch?v=cO5DLbpp3-M

Tufts MAKE & Robotics Club Updates

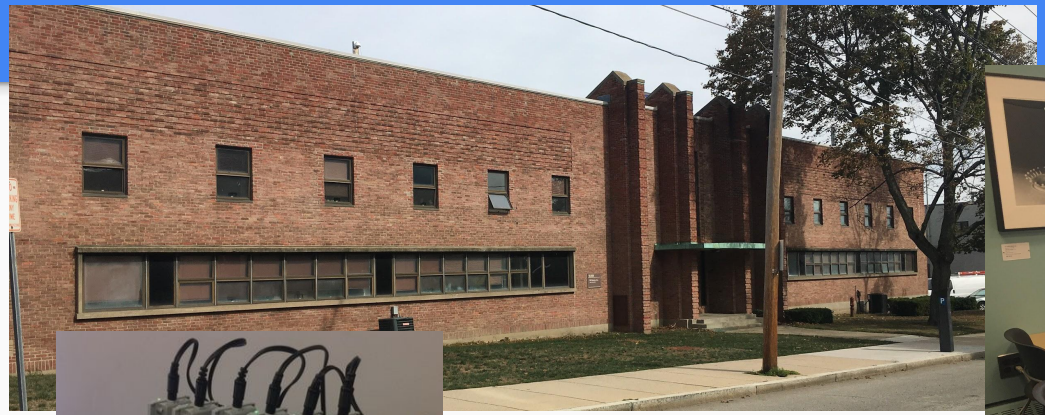
Tufts MAKE will be meeting this **Friday (9/23) from 1:00-3:00 in 574 Boston Ave, Room 202.** In this meeting, we will focus on our project designs, particularly the supply lists, project timelines, team members/roles, and initial design focuses for each project. I would recommend that **everyone come with a laptop** for some quick research about parts and design, but otherwise just bring your creativity!

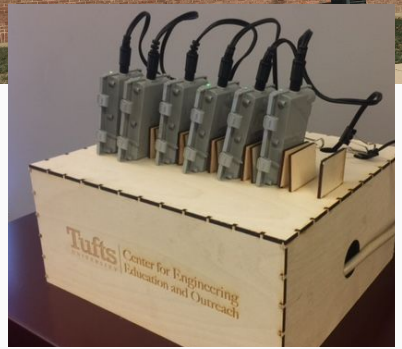
Questions: Email Thomas Coons @ coonst2015@gmail.com

The first real meeting of the year for Tufts Robotics Club will be tomorrow from 3:00 to 5:30 in the mechatronics lab of Bray which is the second building on Boston Ave once you have passed the intersection between Boston and College Avenues. We will be discussing the projects for the year and getting an idea of who will be working on what team. Remember to bring your laptops!

Questions: Email Ryan Stocking @ Ryan.Stocking@tufts.edu

Battery Update: Bray Labs, 504 Boston Ave





2nd Floor
Design Lab
Rm 206

Hours of Design Lab: Monday to Friday: 6am – 8pm, More information: http://sites.tufts.edu/bray/designlab/

Partner Survey (~½ of class has completed)

https://docs.google.com/forms/d/e/1FAIpQLScolrx4kx_h5K9axf68oJu8PekFCh8Jo0E8zTFkXt8By0qcgQ/viewform

Link on course website homepage: http://dreslab.com/robotics2016

Sunday Office Hours

This weekend:

Sunday, September 25, 2016

1:30 PM - 3:00 PM Simple Robotics Meeting

Mayer Campus Center Room 219

All other future Sundays (except Thanksgiving):

Sunday October 2nd through Sunday Dec 11th

1:00 PM - 3:00 PM Simple Robotics Meeting

Mayer Campus Center Room 219

Assignment 2: Sensor Investigations

You are to choose one of the sensors (color/light sensor, ultrasonic sensor, or gyro sensor) and investigate its properties and tolerances. This might include: range, angle, scale, and other important characteristics, depending on which sensor you choose.

Documentation due to website **BEFORE CLASS** on Mon, Sept 26th, 2016

Project (in-class presentation) due on **Monday, September 26th, 2016**

- Can use online documentation during presentation
- Let's keep presentations "short and sweet" (more info in documentation)

Hands-on Activity (w/ LabVIEW)

From last time (last Friday):

Challenge 1: Drive the Motor forward 5 seconds and back 5 seconds

Challenge 2: Use Touch Sensor to “toggle” direction of the motor

Challenge 3: The motor moves as fast as the light sensor reads

New investigations:

Challenge 4: Display sensor value on the EV3 Screen

Challenge 5: Display sensor value on the LabVIEW Front Panel (value? meter? graph?)

Challenge 6: Save collection of sensor data values (e.g. light value each time you click touch sensor) and export to file for analysis in Excel