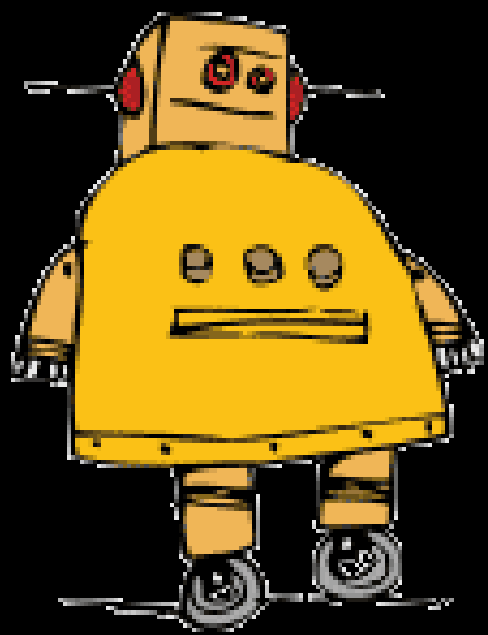




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instructables

**INSTRUCTABLES**



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# OBJECTIVE, OVERVIEW & INTRODUCTION

## Learning Is Best Done When Teaching

- 1. Behavior – Students will learn the steps to create and submit an Instructable.
- 2. Condition – Using an Instructables account, students will develop the documentation needed to recreate the project they are creating
- 3. Criteria – Finished Instructable will be graded based on rubric



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<https://creativecommons.org/faq/#what-does-some-rights-reserved-mean>



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## CAN I GET A COPY OF THESE SLIDES? YES, PROBABLY...

Most presentation lecture slides can be found indexed on [www.steamclown.org](http://www.steamclown.org) and maybe blogged about here on [Jim The STEAM Clown's Blog](#), where you can search for the presentation title. While you are there, sign up for email updates

If you are one of my SVCTE Mechatronics Engineering Students, Look here on the SVCTE Mechatronics Engineering Blog: <https://svctemechatronics.blogspot.com/>



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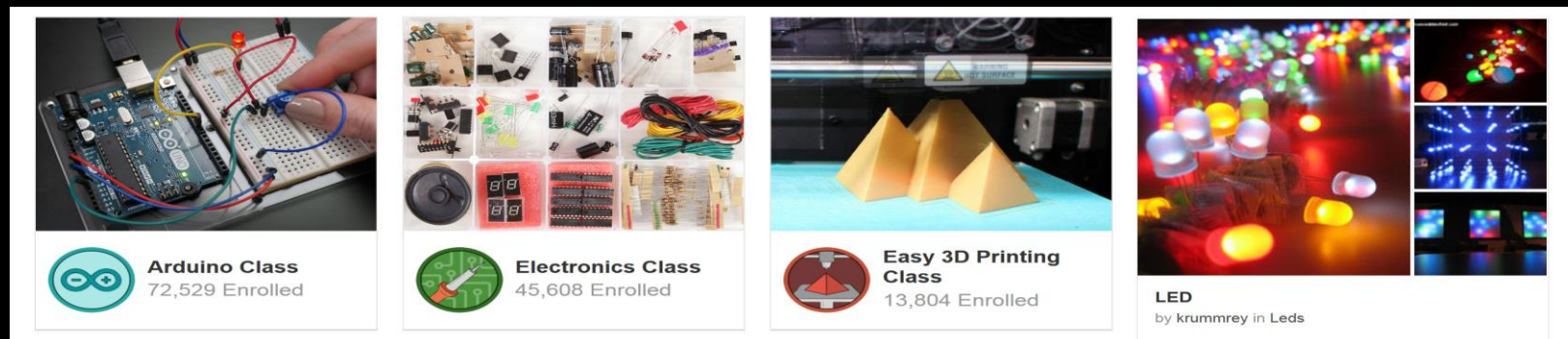
# RESOURCES & MATERIALS NEEDED

- Computer and Internet Access
- Instructables Premium Account
  - See instructions for free premium account
- Interesting Project That Needs Documenting

## WHAT IS AN INSTRUCTABLES?

# SHARE WHAT YOU MAKE WITH INSTRUCTABLES

- Instructables is a platform for you to share what you make through words, photos, video and files.
- From a one step recipe to a 100 step jet engine build, everyone has something to share.
- Join the biggest DIY community on the web.



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**WHY PUBLISH AN ISTRUCTABLES?**

# **EVERYONE HAS SOMETHING TO SHARE**



- We all have secret skills.
- Whether it's a special recipe for the best hot chocolate or the perfect way to drive a nail, even the simplest ideas are worth sharing.
- What's your secret?



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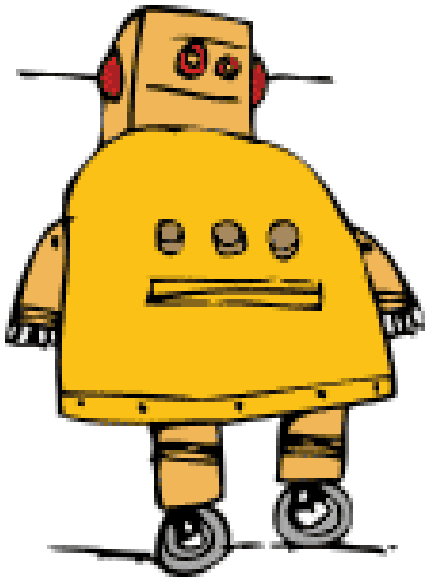


# HOW TO SIGN UP

- Students get an Instructables Premium Account
  - See instructions for free premium account

## INSTRUCTABLES IS COMMITTED TO PROVIDING FREE EDUCATION

Instructables offers free Premium Memberships to teachers and students.



### For Students

A premium membership means access to all of our classes. Learn everything that Instructables has to offer with classes ranging from electronics to pasta making to leatherworking. If you've got a great project to share, we're constantly running contests to reward the best instructables.

### For Teachers

We provide plug and play hands-on projects to let you supplement their curriculum with the best projects we have to offer. You don't need to be a traditional classroom teacher to participate, either. Anyone whose job is explicitly educational, you are invited to participate.

Sign up for a free Premium Membership and get started today!

[Sign Up for Free Premium »](#)



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# ENTER A CONTEST



Closes November 12th

40 prizes | 68 entries

Enter Now!

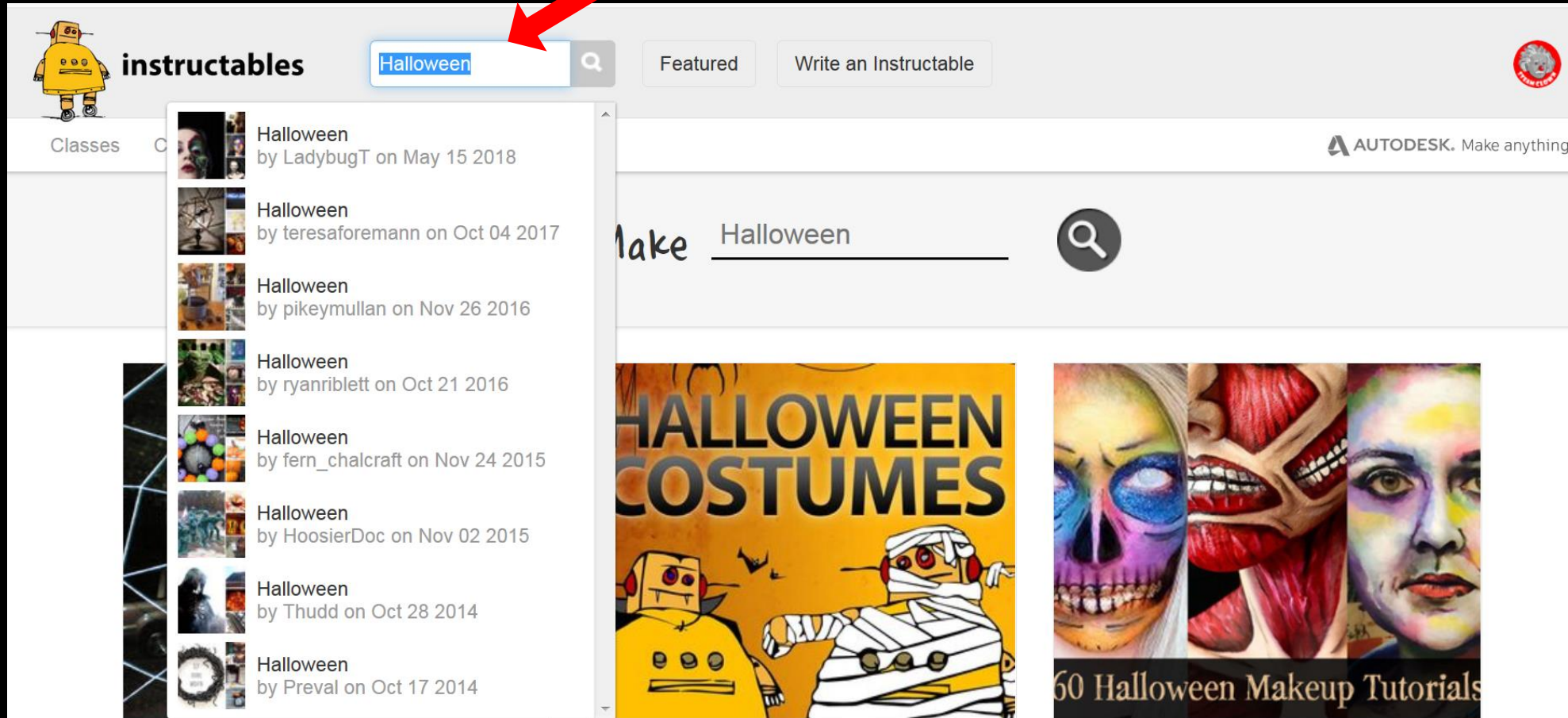


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# WHAT COULD YOU DO?

Search for “Halloween”



The screenshot shows the Instructables website interface. At the top left is the Instructables logo (a yellow robot) and the word "instructables". To the right is a search bar containing the text "Halloween", with a red arrow pointing to it from the text "Search for 'Halloween'". Below the search bar are buttons for "Featured" and "Write an Instructable". On the right side of the header is an Autodesk logo with the text "AUTODESK. Make anything." Below the header, a dropdown menu is open on the left, listing several "Halloween" projects with their creators and dates. The main content area shows a search result for "Halloween" with a magnifying glass icon. Below this, there are two large images: one titled "HALLOWEEN COSTUMES" showing a robot and a mummy, and another titled "60 Halloween Makeup Tutorials" showing three different makeup looks.

Classes C

instructables

Halloween

Featured Write an Instructable

AUTODESK. Make anything.

Make Halloween

HALLOWEEN COSTUMES

60 Halloween Makeup Tutorials

- Halloween by LadybugT on May 15 2018
- Halloween by teresaforemann on Oct 04 2017
- Halloween by pikeymullan on Nov 26 2016
- Halloween by ryanriblett on Oct 21 2016
- Halloween by fern\_chalcraft on Nov 24 2015
- Halloween by HoosierDoc on Nov 02 2015
- Halloween by Thudd on Oct 28 2014
- Halloween by Preval on Oct 17 2014

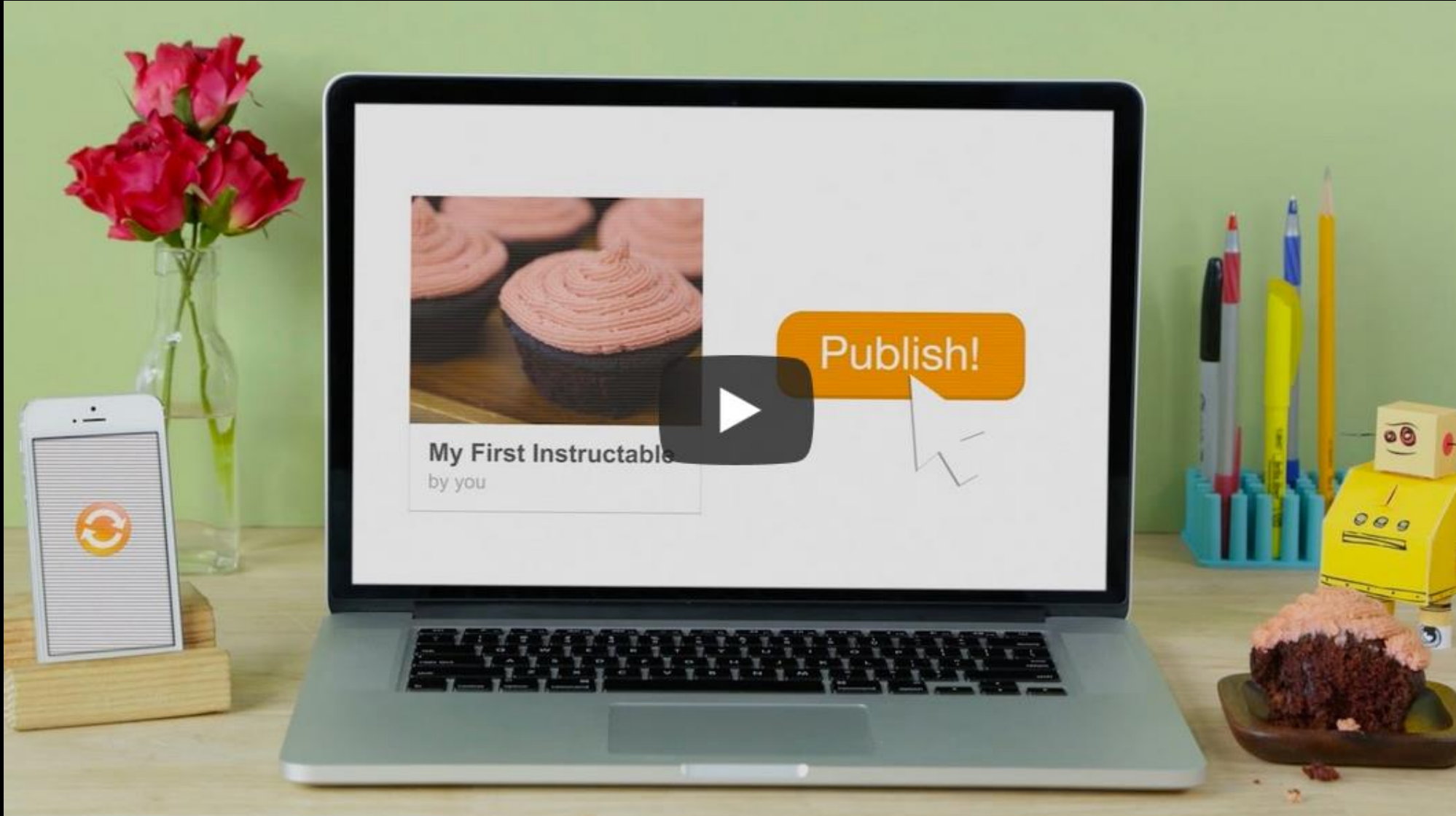


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# INTRODUCTION TO PUBLISHING



Instructables - Share What You Make



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# DECODING A GOOD INSTRUCTABLES

- Take a How To Write An Instructables Class



**HOW TO WRITE AN INSTRUCTABLE**

4 Lessons | 7366 Enrolled | Beginner Level

**Enroll**



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# FIRST OF ALL: WHAT IS AN INSTRUCTABLE?

- An instructable is a step-by-step guide of how to do something... anything! Have a thing you're good at? Share an instructable and teach others how to do that magical thing you do!



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# WHO WRITES INSTRUCTABLES?

- Instructables use photos and text (and sometimes video!) to teach skills and techniques.
- Instructables are authored by people of every skill level - from beginners to professionals!
- Don't worry if you're new to sharing your creations because the Instructables community is very friendly and supportive



# WHAT DO I NEED TO MAKE AN INSTRUCTABLE?

- An Idea & a Camera!!!
- That's it...
- “Don't be intimidated by this huge honkin' camera, for the first seven years of writing instructables, I used Canon point and shoots. I've even used a phone camera for a few instructables!” - [jessyratfink](#)



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# DOCUMENTING A PROJECT - MAKING COOKIES

- My cookie ingredients
- Tools needed to make the cookies
- My camera + tripod
- Marble pastry board to take photos on (I like this as a background for photos)



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# FINDING A GOOD PLACE TO WORK

- Find a clean place to work with good lighting.
- Work during the day near a window because indirect sunlight makes lovely photos without the need to plug in additional lights



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# TAKING GOOD PHOTOS IS REALLY EASY!

- Here are the basic rules I follow:
  - Indirect sunlight is always best. Document during the day near a window if possible.
  - If you're taking detailed and up close photos make sure to use the macro setting on your camera. Almost every camera (and some camera apps on smart phones) have a macro setting. This tutorial will walk you through it!
  - Use a tripod!
    - Low lighting is always where camera shake shows up the worst
    - You can also use stacks of books, shelves, whatever works to get your camera steady!
  - Clean up the area you're shooting in!
    - Try to keep the surface you're working on and the wall behind it nice and clear
    - If not, take process shots in another location
- Your project should be the focal point, not the mess around it...



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# MAKE SURE YOU GET ENOUGH PHOTOS

- Hey, there is an Instructables for that...
  - check out audreyobscura's fantastic Photography Class! It's free and you'll learn all about your camera, lighting, and photo composition
  - If you're shooting photos using a smart phone, I recommend checking out "How to Take Great With an iPhone" instructable



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# TELL THE READER WHAT YOU ARE DOING

- Write a few paragraphs
- Have an introduction on what you are doing
- What are your goals
- What do you want the “Reader” to be able to do
- Probably a Video of the Final Product

## Intro: Engineering Drawing Robot

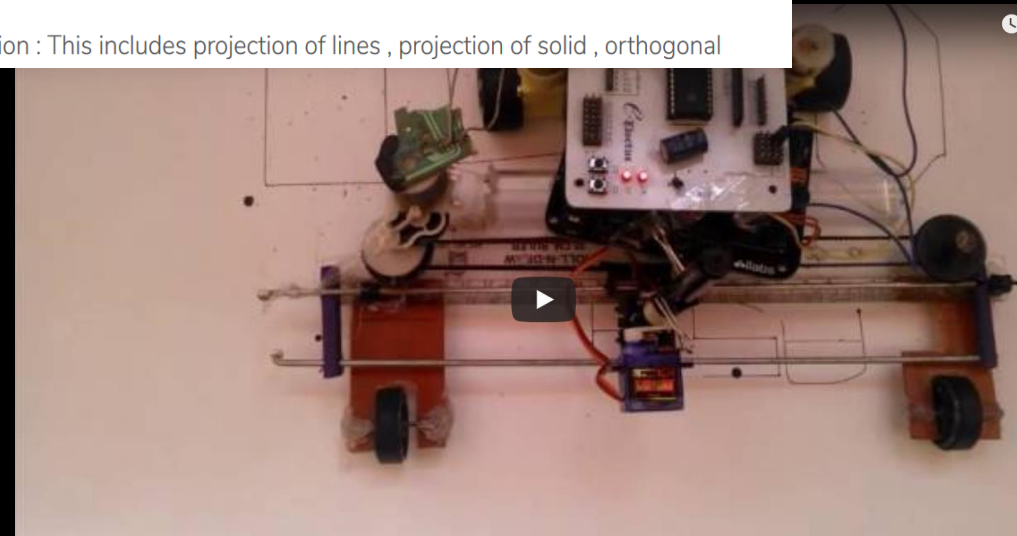
In this project we propose an educational robotic drawing system for learning purpose. Our system uses robot to draw projection of lines and all engineering geometry such as cube ,triangle ,square, polygon autonomously .The bot is completely autonomous once it is programmed through software interface

This robot currently operate in three modes which can be selected through our GUI.

1. Basic geometry (Ex.- square , triangle , cube ,etc )

2.Text mode : for writing text

3. Engineering Projection : This includes projection of lines , projection of solid , orthogonal



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# WHAT ARE THE "COMPONENTS"?

- The first photo you should always take is:
  - tools / supplies / ingredients / materials shot
- If it's something very important to the success of the project
  - Assume your readers have no previous experience with whatever you're doing.



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# TIME TO START MAKING COOKIES...

- What are the steps?
  - Step 1 ...
  - Step 2 ...
- Shoot whatever angle is best for your project
  - Top-down is good
  - What shows the readers what's happening in the clearest way



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# HOW MANY STEPS? HOW MANY PICTURES?

- Make a new Step and Take a picture is any time your project changes in appearance
- In a recipe, that will mean mixing or cooking ingredients. In another project, it could mean taking photos of a wooden object before and after sanding.
- When in doubt, have more steps and take more photos!



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# SENSOR LAB

- Review Lesson 1 and 2 from the Instructables  
Instructables Lesson
- Continue with Lesson 3
  - Lesson 3 - Writing an Instructable and Adding Photos



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# EXPECTATIONS

- You, with your 37 Sensors partner, will create an instructables like document.
  - Using Google Docs, start creating an Instrutable
    - Incorporate all the steps outlined in the “How to write an Instrutable” Lesson
  - Turn in a draft today. Only one team member needs to turn it in, but both of you are graded, so be happy with what is turned in.



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# REFERENCE SLIDES



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# APPENDIX

# APPENDIX A: LICENSE & ATTRIBUTION

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# APPENDIX B: ATTRIBUTION FOR SOURCES USED

- <https://www.instructables.com/class/How-to-Write-an-Instructable-Class/>



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