MAKING STUFF IN THE SHED

MADE FOR CLUG

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Agenda

- Introduction to Makerbot Industries Cupcake CNC
- Building our 'bot #326 Batch VII
- Design process
- Quick word about Arduinos
- Cupcake Demo
Introduction to Cupcake CNC

- Open (Software, Hardware) 3D “Printer”
  - A RepRap derivative
  - Arduino derived control electronics
- Prints ABS and PLA Plastic
  - PLA is biodegradable
- Print volume of ~ 100 x 100 x 120 mm
- Resolution ~0.5mm
- Control software builds for Linux, OSX and Windows
- Kits from Makerbot Industries
  - Principals met at NYC Resistor Hakerspace
Building our 'bot – Soldering endstops
Building our 'bot – Assembling frame
Building our 'bot – main mechanicals done
Building our 'bot – testing electronics
Building our 'bot – extruder heater
Building our 'bot – extruder heater
Building our 'bot – testing extruder electronics
Building our 'bot - extruder mount
Building our 'bot - extruder mount - 2
Building our 'bot – testing extruder
Building our 'bot – first print...
Building our 'bot – Success! :)

[Image of a person working on a project with text: Cupcake CNC and other parts on the table]
Design process

- 3D models in .stl (Stereo Lithography) file format
  - OpenSCAD, Blender (FOSS)
  - Solidworks, AutoCAD (proprietary)
- skeinforge converts from .stl files to gcode
- replicatorg drives reprap board directly
  - or writes to file for use with SD card
- Demo...
Links

- http://makerbot.com
- http://replicat.org
- http://thingiverse.com
- http://pics.blemings.org/gallery/cupcake326
THANKS FOR COMING! :D