

RepRap & MakerBot

Super cheap personal fabrication

or

Destroying scarcity-based economy for fun & profit

Making things

Easy as pie
Let me show you it

What was that?

- Bunch of software telling the hardware what to do. You need it:
 - <http://bit.ly/rrlin> - Linux
 - <http://bit.ly/rrmac> - Mac
 - **Windows users:** Get the .zip file for mac, come see me later.
- Needs java6 (32bit), Python-tk

Hardware?

- MakerBot kit: \$750/piece + shipping+taxes
- More: bitsfrombytes.com, reprap.org
- Plastic: €40 / 2.5kg
 - ABS: Stuff LEGO® parts are made of
 - Hard plastic. Friendly.

Software?

- Slices models, makes toolpaths: Skeinforge
- Prints from the toolpaths: ReplicatorG

Downloads done?

- Extracts to `Makerbot-tools/`
- **Mac users:** Install Drivers, plz.
 - `Makerbot-tools/Serial drivers/`
 - Intel or PPC: Choose wisely
 - No reboot necessary: Just run
`kextload FTDIUSBSerialDriver.kext`

Skeinforge

- Find it in
Makerbot-tools/Skeinforge
- Run `skeinforge.py` for settings
- Important:
 - Raft: Support material, Interface layers
 - Towering
 - Comb

ReplicatorG

- Source in `Makerbot-tools/Source/`
- Toolpaths are Gcode.
- Mostly human-readable, ReplicatorG translates to binary positioning info.

3D models

- Make them yourself: But not today.
- Get it from the interwebs!
 - Thingiverse.com

Tying it together

- That script I told you about?
 - `Makerbot-tools/3dprint
model.stl`
- Runs Skeinforge, opens printable stuff in ReplicatorG.
- Run it, select the machine, press print,
Done

Let's do it!