

Example Models for the Workshop

This document is a rough guide to the models that have been collected for the workshop. There are some brief comments on the models and their suitability. Some have been included here despite being “dirty meshes”. The estimates for the print time have been based on 0.2mm layer height and 15% fill.

For a number of the models the original creators comments and instructions have been captured as well.

The selection presented is an attempt to cater for all tastes with at least one item that will appeal to you.

Attachement for bike light

by ouf, published Oct 6, 2014

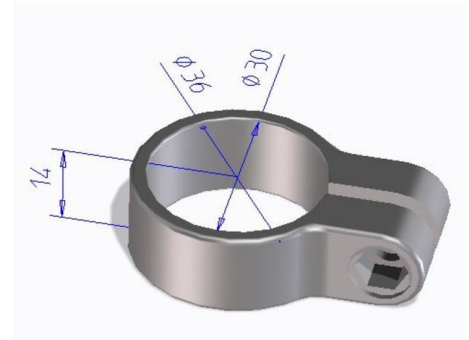
<http://www.thingiverse.com/thing:489876>

Filename: Attachement_for_bike_light.zip

Description

Designed with "PTC creo Element direct modeling express 6" (free) and printed with a Pusa i3.

The source file available at <http://www.fabriqueurs.com/fabrications> can be customized very easily by clicking on the dimensions...



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
fixation_lumiere_F.pk2.stl	No	21 minutes	Looks like it will print well.

Baby's First Mace

by dutchmogul, published Oct 18, 2013

<http://www.thingiverse.com/thing:166802>

Filename: Babys_First_Mace.zip

Description

“Hear ye, hear ye! From ye olde 3D print shoppe... its a rattle for nerdlings!

I printed mine in two colors and assembled with a little superglue inside the rims of the mace head and pommel. For a truly baby-proof version, I'd suggest printing the second mace head (sealed) and putting the peas in while the print is about halfway there, thus entombing the rattle-y bits for all of eternity... or something.”



Comment: *I don't seriously suggest we print one of these in the Workshop. It is here simply because it appealed to my sense of humour. If you go to my own website www.techmonkeybusiness.com and look at the ceramics and sculpture gallery you will see why.*

Celtic Trinity Tealight Holder

by gabrielguzman, published Oct 6, 2014

<http://www.thingiverse.com/thing:489648>

Filename: Celtic_Trinity_Tealight_Holder.zip

Description

Another celtic-inspired design of the Trinity knot, made into a tealight holder. The base needed some work, which I fixed and showed in the uploaded files. I also changed the dimensions of the cup at the end of the stem to make it deeper. The pictures show the first prototype but the actual STL file has the changes.

Note: I haven't built the object with the final changes yet but will do over the next few days. I'd love to see how it worked for you.



Instructions

Knotwork traced in Inkscape removing background, and SVG file extruded in Tinkercad. Tealight holder stem made with PhotoToMesh 5 as a solid object. Final assembly made in Tinkercad. Printed with 20% infill. I'm still experimenting with different parameters.

Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
trinity_celtic_knot_tealight_holder_2.stl	No	3:43hrs	Very slow to slice, too long to print.

Crates

by onebitpixel, published Jul 25, 2014

<http://www.thingiverse.com/thing:405788>

Filename: Crates.zip

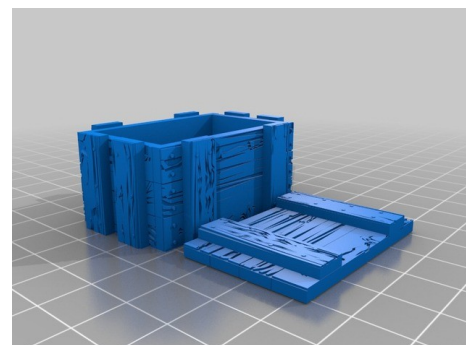
Description

“using these for a 3D rebuild of Incursion can be used for any other miniature game

wooden crates; w/lids

larger crate contains an internal lip to insert the sideboard shelf if needed

smaller crate requires you to glue (I use acetone) the two blocks to the underside of the crate; lining them up with the two connecting boards along the one side; creates a lift for the crate w/o the need to print with supports”



Comment: The models are all non-manifold and take an incredibly long time to slice. These are bad models that would take a very long time to fix and I would not recommend them. Some Slicing programs may be able to handle them.

Delving Decor: Medieval Barrels

by dutchmogul, published Oct 7, 2012

<http://www.thingiverse.com/thing:32016>

Filename: Delving_Decor_Medieval_Barrels.zip

“These guys were printed on my Makerbot Replicator at a .10 layer height with %100 infill. Plate temp at 110 and extruder at 230. Painted with acrylic model paints.”



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
m_medieval_barrel.stl	No	25 min	Despite being non-manifold they probably print OK.

Flowers earrings

by NaviMaker, published Oct 5, 2014

<http://www.thingiverse.com/thing:489121>

Filename: Flowers_earrings.zip

Description

A couple of earrings featuring and abstract pattern based on flowers and leaves. We printed them with special nylon filament, they are more durable and soft than PLA or ABS. Printed with a NaviMaker Pure.



Instructions

After you have printed the object you have to attach an earring finding to it.

Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
Earrings.stl	Yes	6 minutes	Looks like a great example

Golden Ratio Seahorse Gears

by JamesWhite, published Feb 25, 2014

<http://www.thingiverse.com/thing:258201>

Filename: Golden_Ratio_Seahorse_Gears.zip



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
V3 Gear	Yes	12 minutes	Two of these required.
Left Arm	Yes	17 minutes	
Right Arm	Yes	17 minutes	

Interlocking Hexagon for DIY boardgame

by dukeisi, published Oct 6, 2014

<http://www.thingiverse.com/thing:490163>

Filename: Interlocking_Hexagon_for_DIY_boardgame.zip

The original model file was rubbish but with a bit of jiggery pokery in Blender I fixed it and saved it as the following two files;

Fixed_Interlocking_Hexagon_Tile.blend and

Fixed_Interlocking_Hexagon_Tile.stl

Description

This is compatible with the hexagon with a hole

<http://www.thingiverse.com/thing:484499> . It can be used to create your own board game or add to an existing game.



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
interlocking_hexagon.stl	Yes	-	Rubbish. File is stuffed. I fixed this as below.
Fixed_interlocking_hexagon.stl	Yes	5 minutes	An ideal demo object.

Lens Adapter for Ring Lamp

by diygallery, published Oct 5, 2014

<http://www.thingiverse.com/thing:488962> – see below

Filename: Lens_Adapter_for_Ring_Lamp.zip

Description

This is a lens adapter for the Ring Lamp for macro photography

(<http://www.thingiverse.com/thing:480042>)

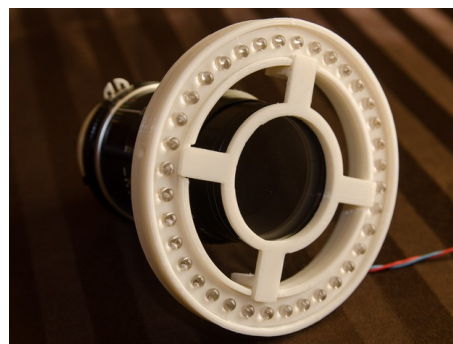
You can customize the adapter to fit lens up to about 65mm diameter.

Instructions

Edit the .scad file to set the diameter of the lens (measure the inner diameter of your filter thread, for instance for a 52mm filter I measure 51.1mm).

Print the object, put the adapter on the lamp (see photos)

The adapter is loosely screwed on the filter thread.



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
ringlamp_lensadapter.stl	Yes	31 Minutes	Scad file present – An excellent example

Ring lamp for macro photography

by diygallery, published Sep 28, 2014

<http://www.thingiverse.com/thing:480042>

Filename: Ring_lamp_for_macro_photography.zip



Description

A LED lamp for macro photography, power supply coming soon.

You can find a lens adapter here: <http://www.thingiverse.com/thing:488962> – see above

Instructions

Print the parts. Fit 36 ultra-bright 5mm white LEDs in the front part. Solder all the LEDs in parallel.

Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
ringlamp_back.stl	Yes	1:20 hrs	Scad files present – Strange solid layer for some reason.
ringlamp_front.stl	Yes	30 minutes	Scad files present

LesWheels Toy Car #1

by CreatorLes, published Oct 6, 2014

<http://www.thingiverse.com/thing:490477/files>

Filename: LesWheels_Toy_Car_1.zip

Description

Everyone loves HotWheels cars, so why not [YourNameHere]Wheels for the cars that you design? I'm Les so my cars are LesWheels.

HotWheels cars are 1/64 scale, or typically about two to three inches in length. I am open sourcing these designs so those with printers and know-how can print their own without paying a fee. Revision notes of this first car (named bLesSings) follow.

bLesSings8: I have not yet printed this model. This is my latest model after about three days of playing around with CAD and printing revisions as I go. I am learning techniques for making the models assemble-able as well as paint-able and print-able. One novelty I've come up with is the sprue sheet. Much like a sprue tree on a conventional injection molded model, the sprue sheet holds all the parts together and gives you a handle for painting them. The difference is that the sprue sheet exists as a bed-height one or two layer thick sheet covering the full sprue area. When the paint dries, you just trim the sheet with an x-acto knife to separate the parts.

bLesSings6: I have printed this model and it turned out just fine. This larger 1:36 scale model is just the body, fenders, and seat area with footholes that were later removed.



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
bLesSings6.stl	No	1:53hrs	Scad files present – very long time to slice. Probably prints OK though.
bLesSings8.stl	No	46 minutes	Scad files present – better model than bLesSings6

Lionel Coal Train

by akormendy, published Dec 27, 2013
<http://www.thingiverse.com/thing:213560/#files>

Filename: Lionel_Coal_Train_Truck.zip



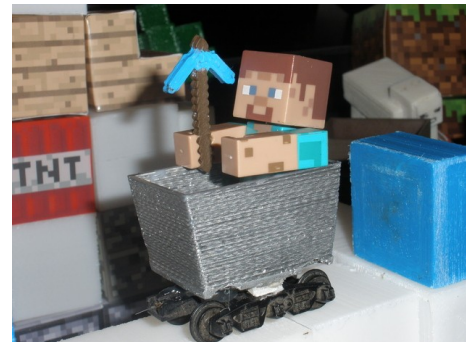
Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
train_body.stl	Yes	1:20hrs	It is printed on its side which seems a bit weird.
train_hitch.stl	Yes	12 minutes	

Mine cart for Minecraft toy figures

by mcsdaver, published Nov 30, 2013
<http://www.thingiverse.com/thing:193108/#files>

Filename: Mine_cart_for_Minecraft_toy_figures.zip

Minecart333.stl is non-manifold - at 0.2mm layer height it is estimated to take 40 minutes. The model looks dodgy once sliced.
MinecartWheels4.stl is manifold - at 0.2mm layer height it is estimated to take 6 minutes.
WheelswAxles.stl is manifold - at 0.2mm layer height it is estimated to take 6 minutes
Minecart2.stl is non-manifold - at 0.2mm layer height it is estimated to take 40 minutes. The model is iffy but may print OK.



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
Minecart333.stl	No	40 minutes	The model looks dodgy once sliced.
MinecartWheels4.stl	Yes	6 minutes	
WheelswAxles.stl	Yes	6 minutes	
Minecart2.stl	No	40 minutes	The model is iffy but may print OK.

Mnenom • SD Card x4 Wallet Case

by LootKit, published Sep 25, 2013
<http://www.thingiverse.com/thing:155898/#files>

Filename: Mnenom_SD_Card_x4_Wallet_Case.zip

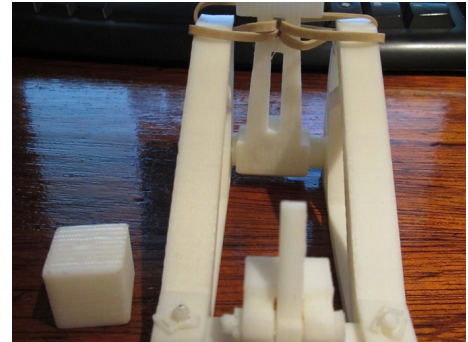


Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
Mnemon-4xSDCardWalletCase-SeeMore3DModelsAtLOOTKIT.stl	Yes	21 minutes	You will need to print two of these.

The Ultimate Catapult, almost. [Seej]

by roguemat, published Sep 28, 2012
<http://www.thingiverse.com/thing:31288/#files>

Filename: Roguemat_The_Ultimate_Catapult_almost_Seej.zip



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
All of the STLs collected onto one deck.	No	1:55 hours	Sketchup Model included. There are a few weird artifacts but it will probably print OK.

SD Card Holder Mark 2

by jpcw, published Jun 26, 2011
<http://www.thingiverse.com/thing:9637/#files>

Filename: SD_Card_Holder_Mark_2.zip



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
SDCardBase.stl	Yes	1:05 hours	Some artifacts present.
SDCardHolderLid.stl	No	51 Minutes	

SD Cards Holder

by diadzine, published Apr 7, 2013
<http://www.thingiverse.com/thing:71238>

Filename: SD_Cards_Holder.zip



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
SD_Holder_Flat.stl	Yes	34 Minutes	A good simple example model.

Skull Clothespin

by dipro, published Oct 6, 2014
<http://www.thingiverse.com/thing:489911>

Filename: Skull_Clothespin.zip

Description

Ready for Halloween? Here comes a skull clothespin. When the pin opens, the jaw of the skull moves. It's a simple remix of - surprise - a clothespin model and a skull model found here on Thingiverse.

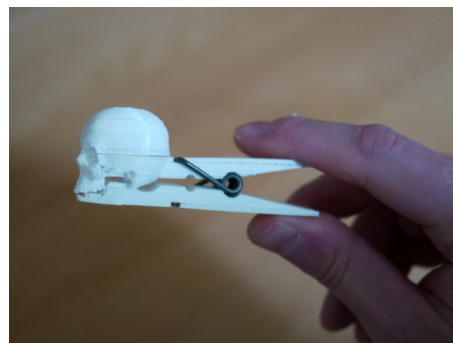
Instructions

The file "skull_pin_complete.stl" is primarily for visualization of how the thing looks in its final form. It's not so well suited for printing, as the various parts are not conveniently positioned for slicing.

For actual slicing, use the other three files. They are for the top and bottom part of the pin, as well as the top of the skull. In order to avoid the requirement for support, I have separated the skull into two parts which you have to glue together after printing. For PLA, I can recommend cyanacrylate (most household and crafting glues won't do).

In order to assemble the thing, you need the spring from an actual clothespin. Be aware that they come in slightly varying dimensions - not all of mine fitted, but the older ones did. You may need to slightly tweak or scale the model, depending on the kind of springs you have at hand.

Thanks to users MacGyver and PolygonPusher for their models of a skull and clothespin respectively!



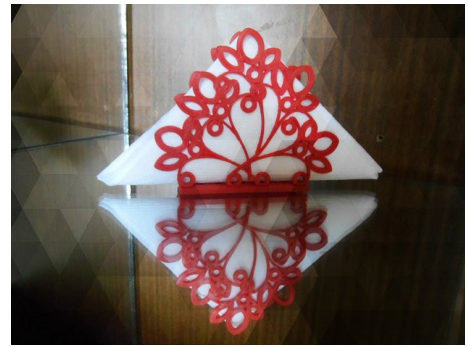
Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
skull_pin_bottom_part.stl	No	28 minutes	Seems quite large 93mm long x 61mm wide
skull_pin_top_part.stl	No	3:20 hrs	Quite large. Very long time to slice, too long to print
skull_pin_top_part2.stl	No	1:46 hrs	Quite large. Too long to print

Further comments: When checked in Blender this model is huge and completely out of proportion to what the photos show so there is something odd about the files that have been provided.

Stand for napkins

by TanyaAkinora, published Oct 6, 2014
<http://www.thingiverse.com/thing:490265/#files>

Filename: Stand_for_napkins.zip

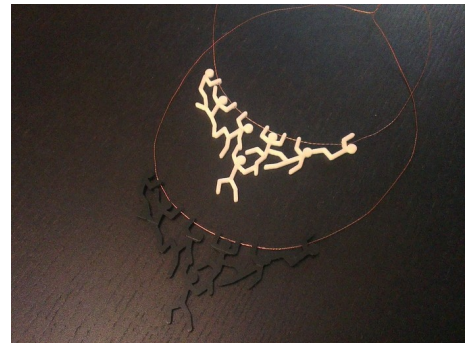


Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
napk_1.stl	Yes	33 minutes	Very long time to slice. Intricate but should be a good example.
napk_2.stl	Yes	18 Minutes	Good example object

StickMan's Necklace (or Pendant)

by skarab, published Mar 30, 2013
<http://www.thingiverse.com/thing:67902/#files>

Filename: StickMans_Necklace_or_Pendant.zip



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
Stickman_Necklace.stl	Yes	12 minutes	Intricate but should be a good example. Sketchup file is provided too.

Swiss Army style keyring V2 with thumbnail cutouts

by MarkBenson, published Jun 4, 2013
<http://www.thingiverse.com/thing:98427>

Filename: Swiss_Army_style_keyring_with_thumbnail_cutouts.zip

Description

I love the Swiss Army Keyring by outcastrc, but using it is a little cumbersome. It needed those little cut outs in the side that allow you to get a thumbnail in to grip the key to make opening it that much easier.

So that's what this is. The Swiss Army style keyring with cut outs. I have also moved the key ring clip as that was getting in the way of one of the keys.

This version is intended to be used with M3 nuts and bolts.

I've recreated the whole thing in openScad and the newest version is (mostly) parametric.

Update: I had messed up the dimensions after using the minkowski



sum function to add the curved edges on this model. I have reworked the scad file to take that into account and the dimensions are now back to the same as the original. Also the new scad file is much more parametric. I haven't tested how tollerant it is when changing dimensions, you may have to alter a few offsets here and there. If you do change it, let me know how you get on.

I should also say that the one scad file now generates both sides. Just change the value of variable 'renderNutHoles' to either 1 or 0.

You will also need to include functions.scad file in the same directory as the main scad file to render the cutouts for the nuts.

Instructions

Print both sides, fit M3 nuts or M3 lock nuts to the side with the hex recess. Fit three M3 screws to the other side, adding M3 washers between the sides and keys. Nip the screws up and if needed cut the screws down to length (measure, remove, cut and refit).

Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
sak-both-sides.stl	Yes	22 minutes	Scad files present – ideal example

Zheng3 Penny Mortar

by zheng3, published Jun 8, 2012

<http://www.thingiverse.com/thing:24556>

Filename: Zheng3_Penny_Mortar.zip

Instructions

Construction requires a pair of elastic bands. See the Zheng3 Penny Ballista for detailed instructions on rigging the bands through the posts and nock. [Www.thingiverse.com/thing:23464](http://www.thingiverse.com/thing:23464)

Flagrant stagecraft alert: there's a piece of hookup wire holding the nock in firing position.

Seej is a tabletop wargame based around 3D printing. Check out www.s33j.net for rules and more information.

At a minimum, you'll need the Seej starter set: www.thingiverse.com/thing:24013

You can also search Thingiverse for Things with the seej tag.

Be sure to check Zheng3.com for updates. If Twitter's more your thing then follow Zheng3 at twitter.com/Zheng3_Jim.



Filename	Manifold (Y/N)	Estimated time to Print – 0.2mm layer height	Comments
Zheng3_Penny_Mortar_Complete.stl	Yes	2:50 hours	Unfortunately it is a bit long to print in the workshop, but the Seej game is a great concept.