

OpenSCAD

The Programmers Solid 3D CAD Modeller

```
1 // logo.scad - Basic example of module, top-level variable and $fn usage
2
3 Logo(50);
4
5 // The $fn parameter will influence all objects inside this module
6 // It can, optionally, be overridden when instantiating the module
7 module Logo(size=50, $fn=100) {
8     // Temporary variables
9     hole = size/2;
10    cylinderHeight = size * 1.25;
11
12    // One positive object (sphere) and three negative objects (cylinders)
13    difference() {
14        sphere(d=size);
15
16        cylinder(d=hole, h=cylinderHeight, center=true);
17        // The '#' operator highlights the object
18        #rotate(90, 0, 0) cylinder(d=hole, h=cylinderHeight, center=true);
19        rotate[0, 90, 0] cylinder(d=hole, h=cylinderHeight, center=true);
20    }
21 }
22
23 echo(version=version());
24 // Written by Clifford Wolf <clifford@clifford.at> and Marius
25 // Kintel <marius@kintel.net>
26 //
27 // To the extent possible under law, the author(s) have dedicated all
28 // copyright and related and neighboring rights to this software to the
29 // public domain worldwide. This software is distributed without any
30 // warranty.
31 //
32 // You should have received a copy of the CC0 Public Domain
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34 // If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.
35
36
```

Viewport: translate = [-0.00 -0.00 -0.00], rotate = [67.60 0.00 36.90], distance = 172.84

Console

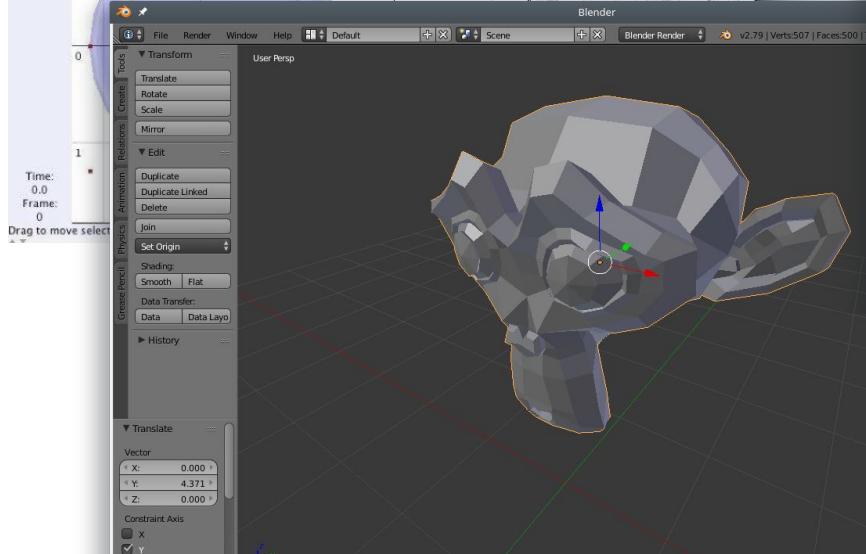
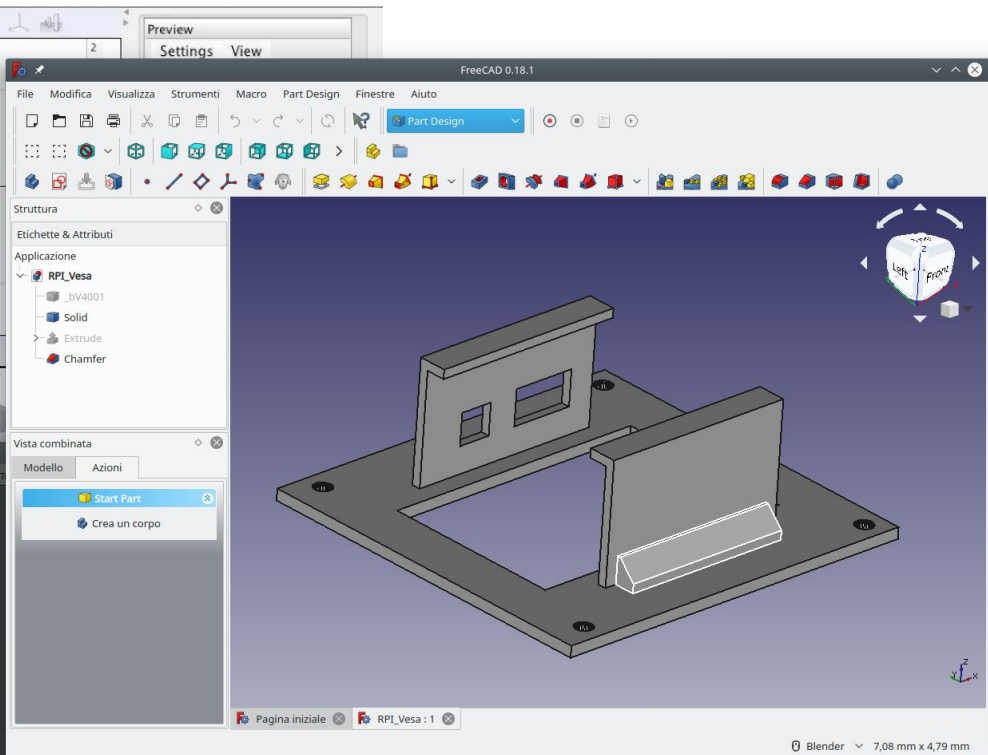
```
Compiling design (CSG Products generation)...
Geometries in cache: 36
Geometry cache size in bytes: 898320
CGAL Polyhedrons in cache: 0
CGAL cache size in bytes: 0
Compiling design (CSG Products normalization)...
Compiling highlights (1 CSG Trees)...
Normalized CSG tree has 4 elements
Compile and preview finished.
Total rendering time: 0 hours, 0 minutes, 0 seconds
```

OpenSCAD 2015.03

BgLUG
Bergamo, 03/07/2019

rel. Lazzari Omar

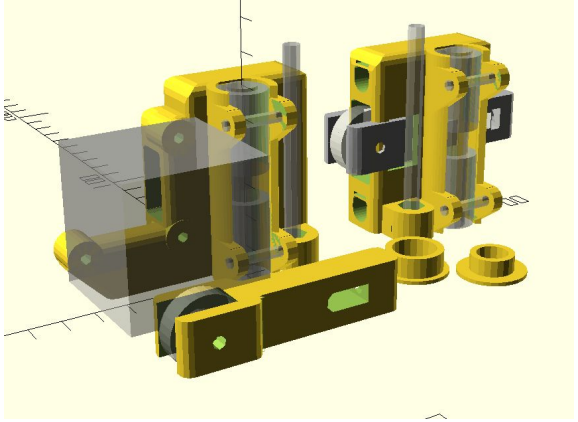
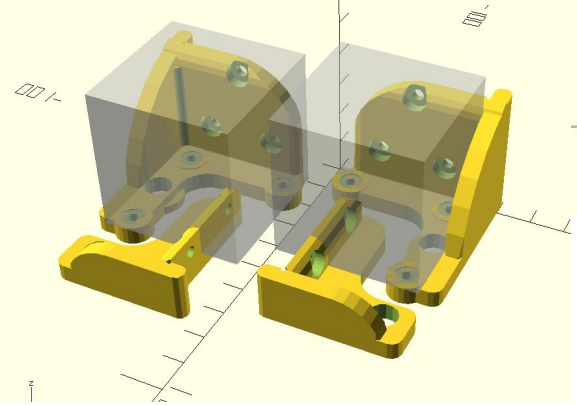
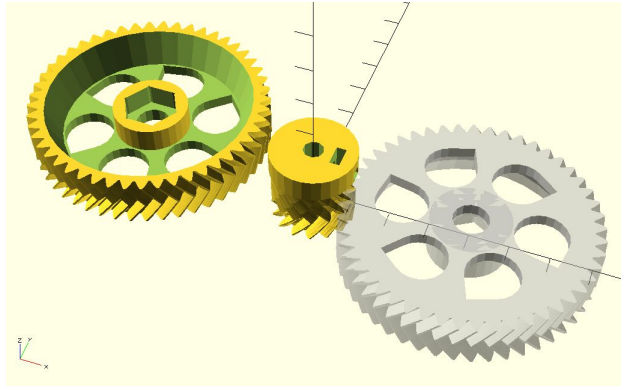
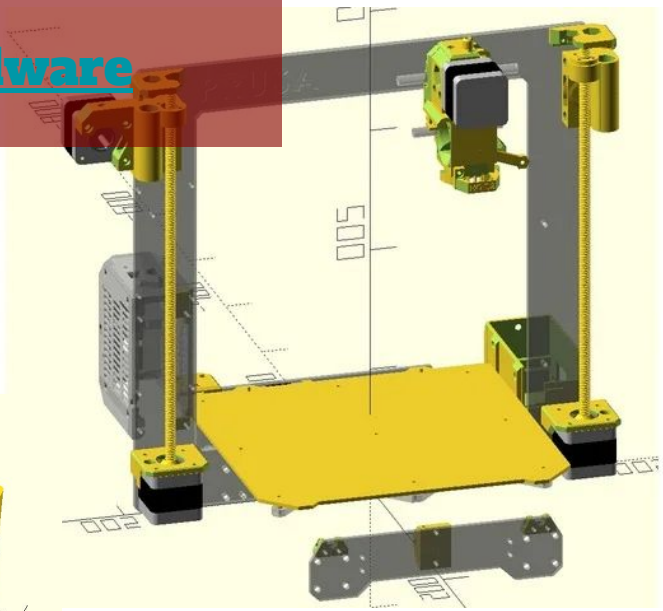
SOFTWARE DI MODELLAZIONE 3D



[FreeCAD](#), [Blender](#), [BRL-Cad](#),
[SweetHome3D](#), [Wing3D](#),
[ImplicitCAD](#), [ArtOfIllusion](#)

Inventor, Siemens NX, Solidworks,
Rhino, Catia, SketchUP

Brevetto FDM e 3D printer open-hardware



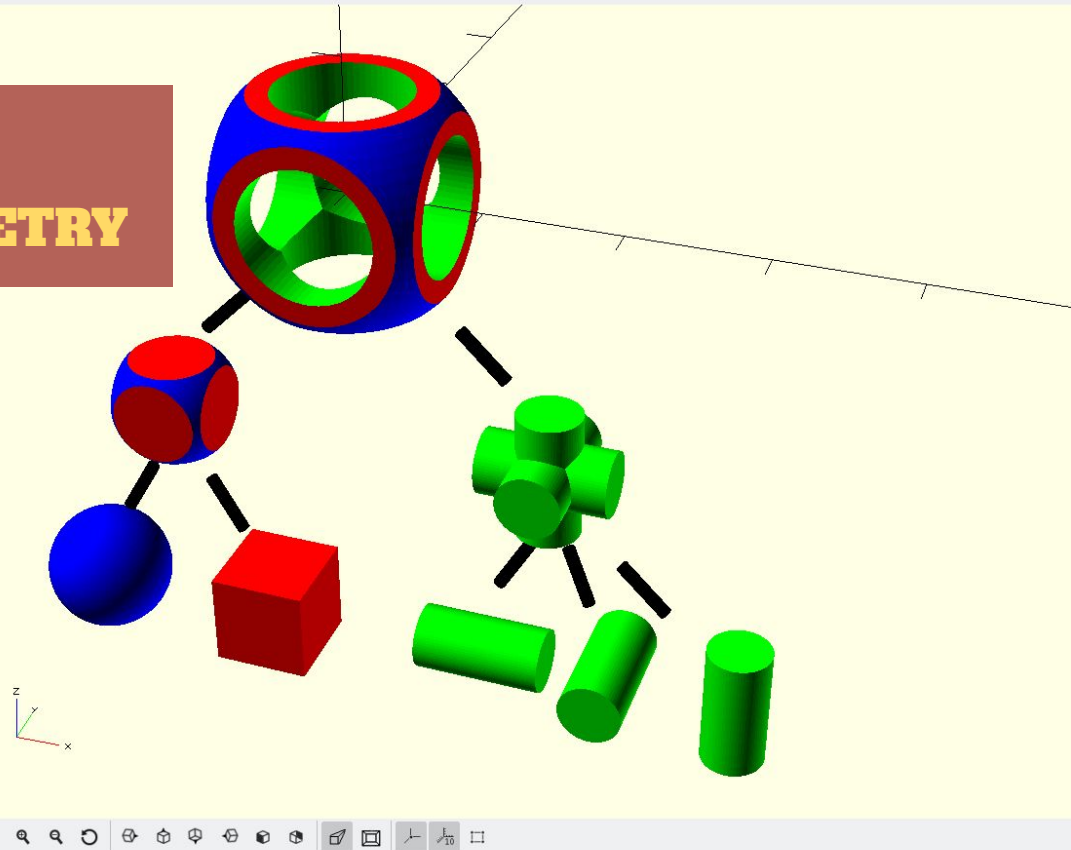
```

1 // CSG-modules.scad - Basic usage of modules, if, color, $fs/$fa
2
3 // Change this to false to remove the helper geometry
4 debug = true;
5
6 // Global resolution
7 $fs = 0.1; // Don't generate smaller facets than 0.1 mm
8
9 // Main geometry
10
11 difference() {
12     intersection() {
13         body();
14         intersector();
15     }
16     holes();
17 }
18
19 // Helpers
20 if (debug) helpers();
21
22 // Core geometric primitives.
23 // These can be modified to create variations of the final object
24
25 module body() {
26     color("Blue") sphere(10);
27 }
28
29 module intersector() {
30     color("Red") cube(15, center=true);
31 }
32
33 module holeObject() {
34     color("Lime") cylinder(h=20, r=5, center=true);
35 }
36
37 // Various modules for visualizing intermediate components
38
39 module intersected() {
40     intersection() {
41         body();
42         intersector();
43     }
44 }
45
46 module holeA0 rotate([0,90,0]) holeObject();
47 module holeB0 rotate([90,0,0]) holeObject();

```

CSG

CONSTRUCTIVE SOLID GEOMETRY

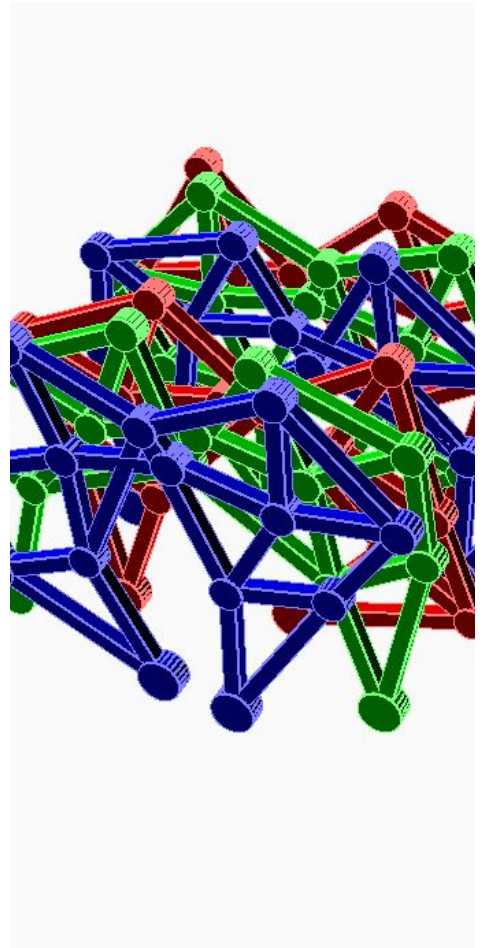
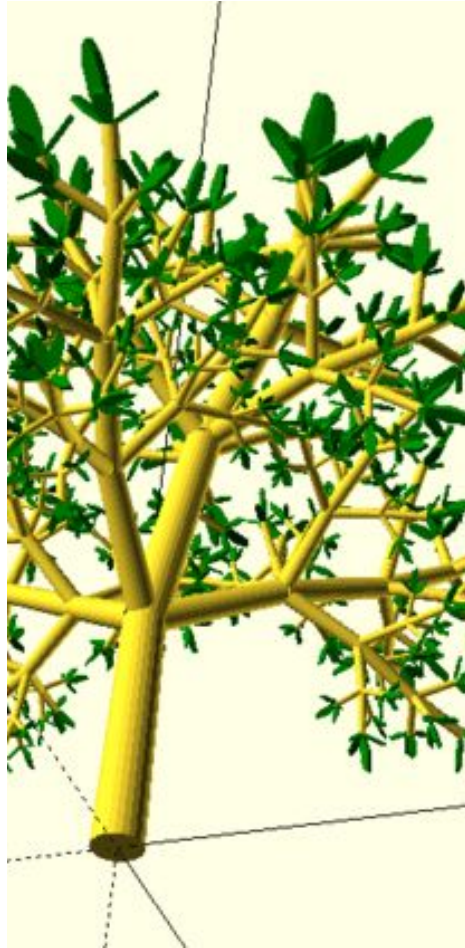
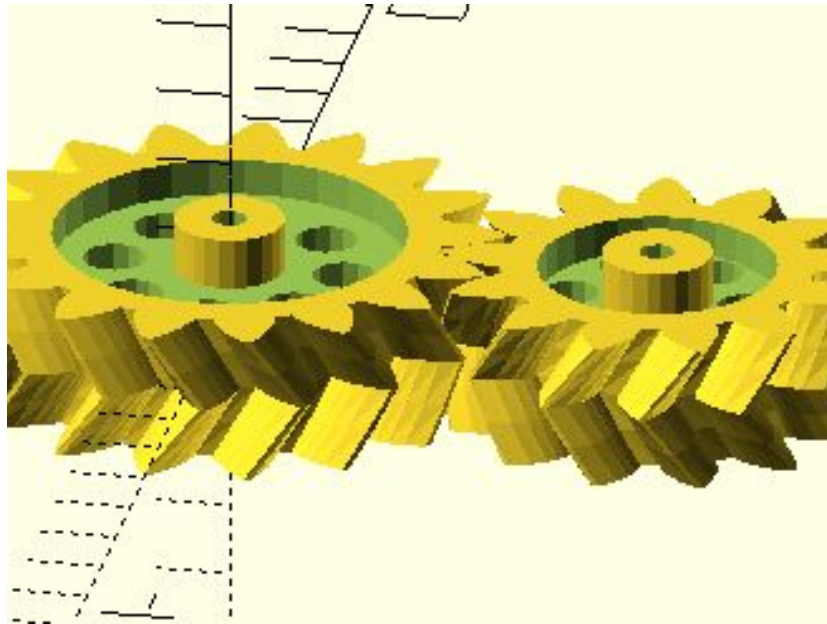
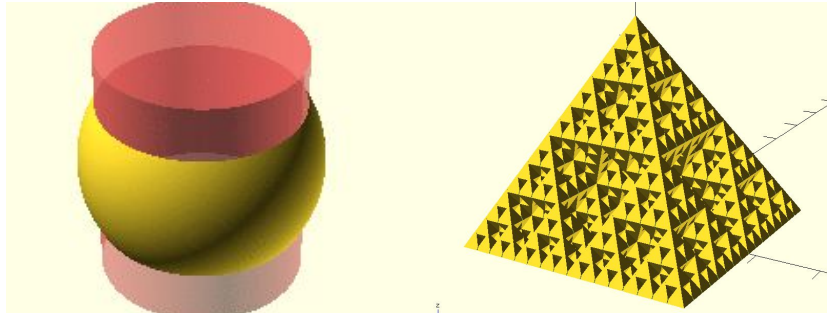


Console

```

Compiling design (base tree generation)...
ECHO: version = [2015, 3, 0]
Compiling design (CSG Products generation)...
Geometry in cache: 4

```



PER PROSEGUIRE DIGITA

bit.ly/bglugopenscad