OpenSCAD
The Programmers Solid 3D CAD Modeller

logo.scad — OpenSCAD

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Editor

```
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
33  // Dedication along with this software.
34  // If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.
35
36
```

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
```

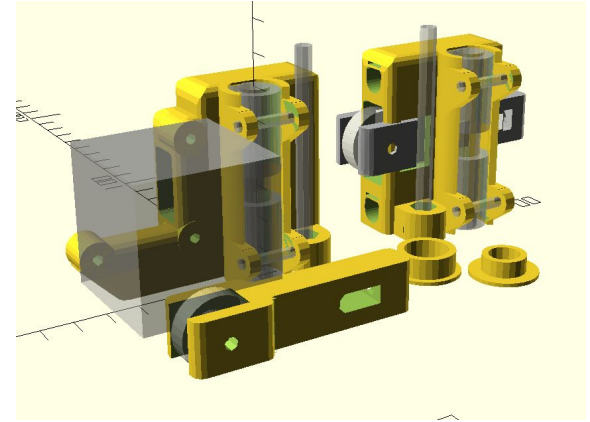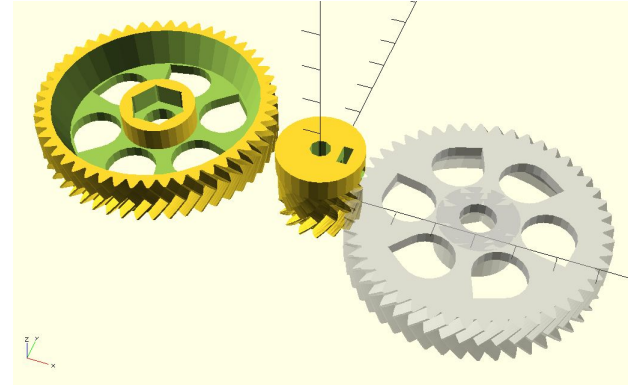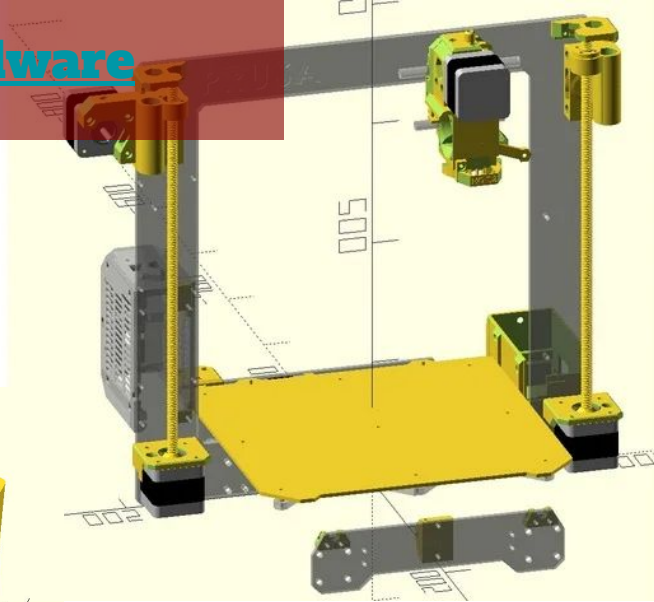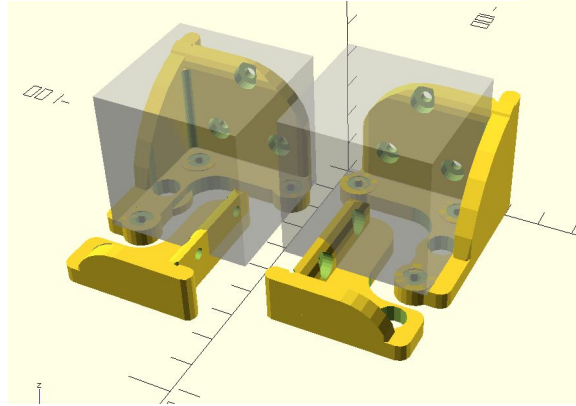Viewport: translate = [-0.00 -0.00 -0.00], rotate = [67.60 0.00 36.90], distance = 172.84   OpenSCAD 2015.03

SOFTWARE DI MODELLAZIONE 3D
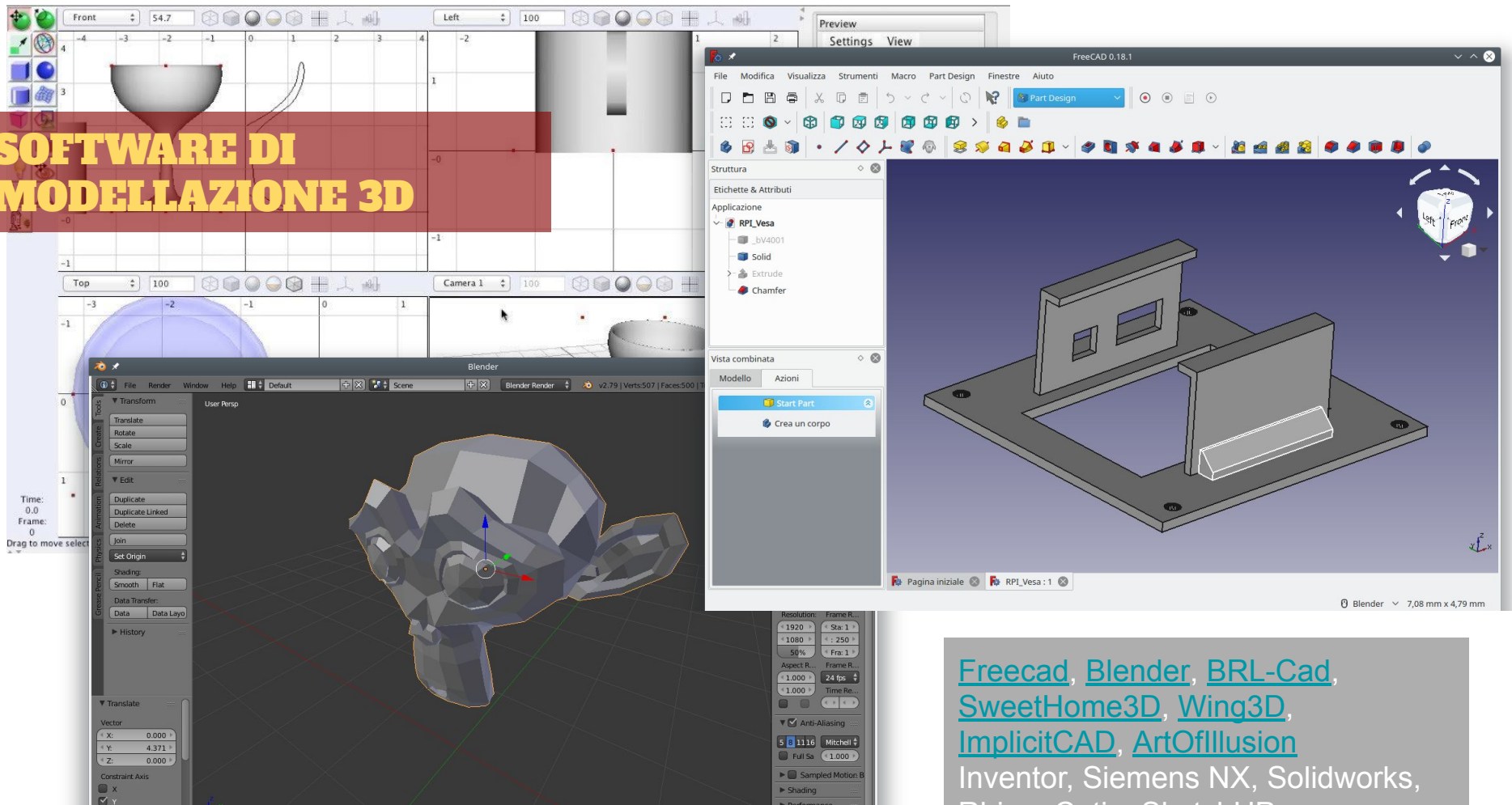
Freecad, Blender, BRL-Cad, SweetHome3D, Wing3D, ImplicitCAD, ArtOfIllusion
Inventor, Siemens NX, Solidworks, Rhino, Catia, SketchUP

File   Edit   Design   View   Help
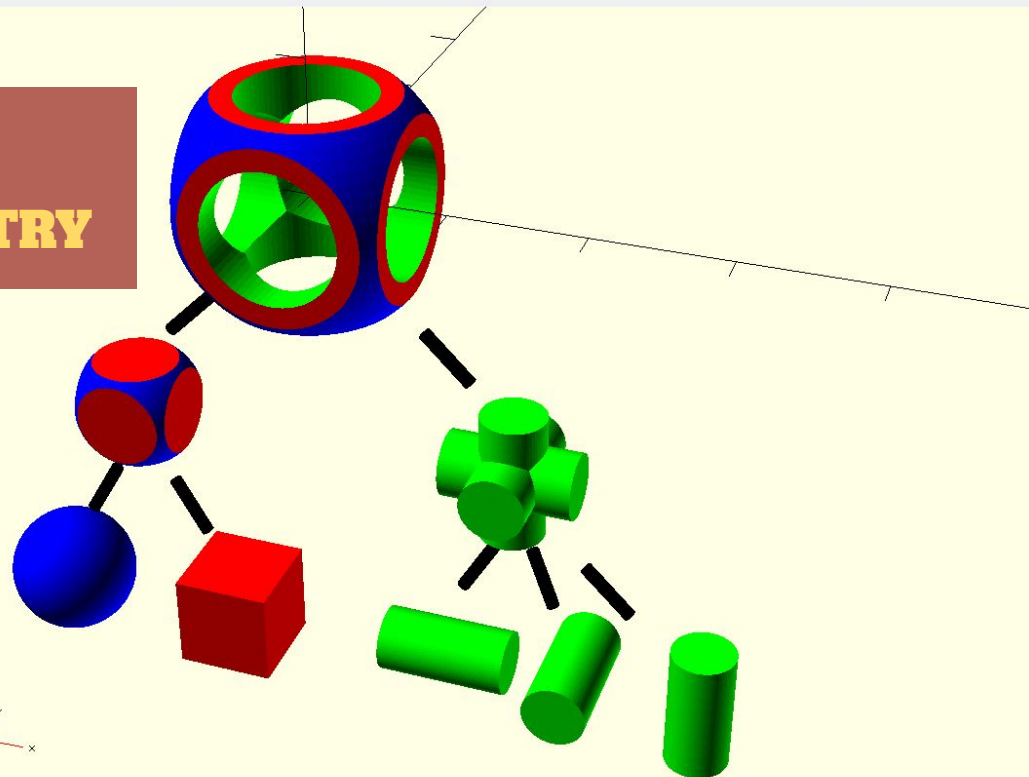
Editor

CSG
CONSTRUCTIVE SOLID GEOMETRY

```
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
10  // Main geometry
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 holeA() rotate([0,90,0]) holeObject();
47  module holeB() rotate([90,0,0]) holeObject();
```
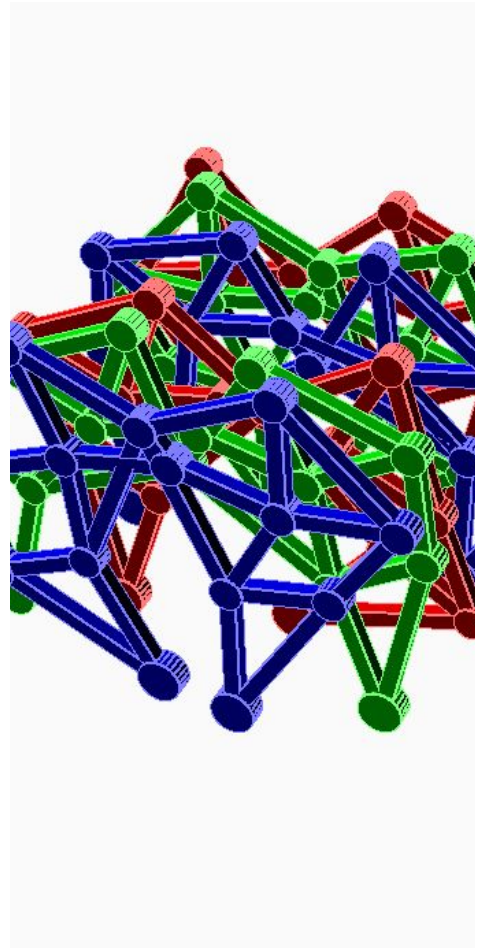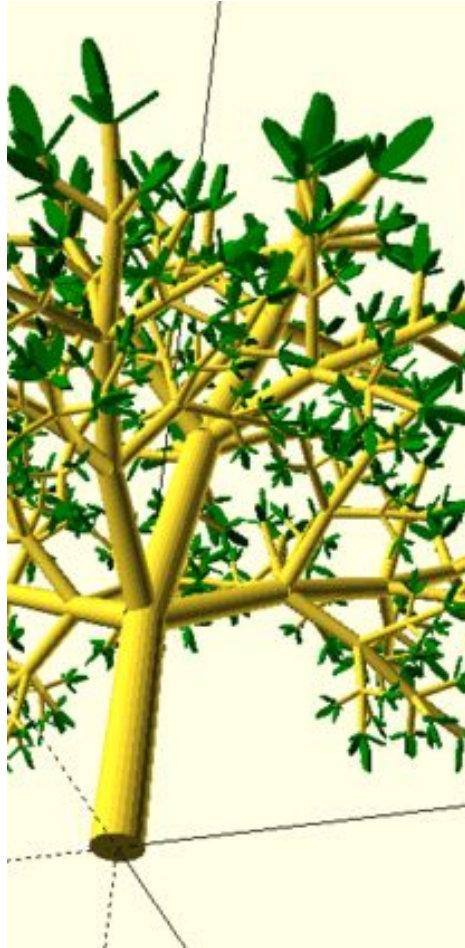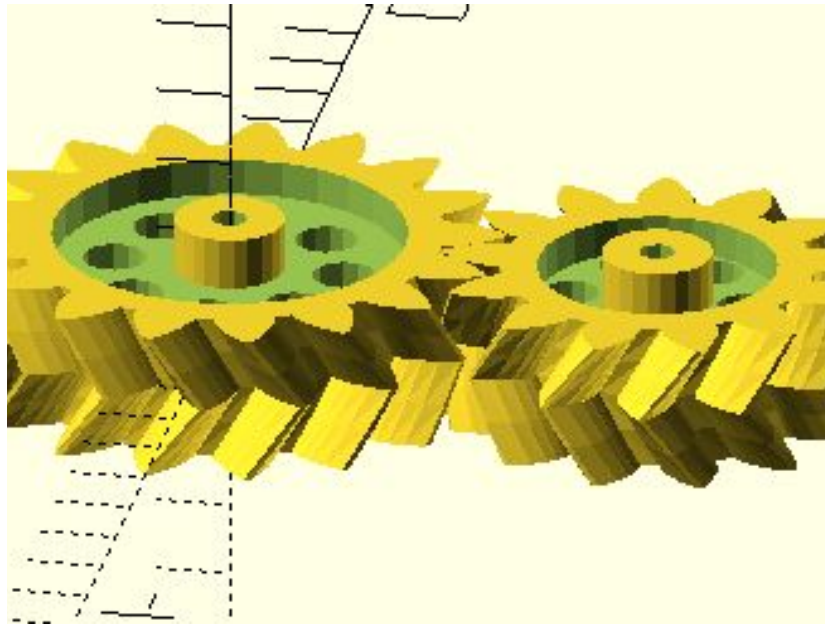
Console

ECHO: version = [2015, 3, 0]
Compiling design (CSG Products generation)...
Geometries in cache: 4
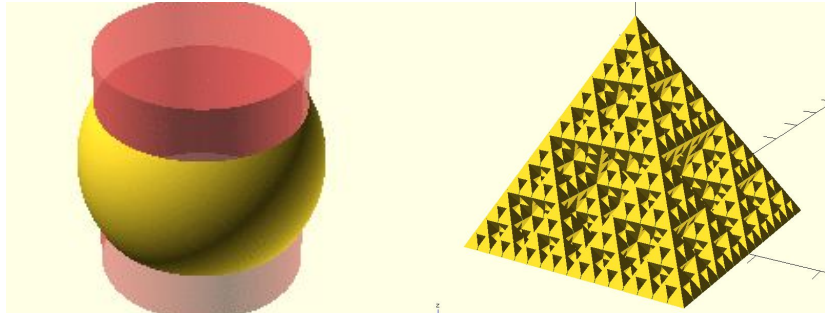
PER PROSEGUIRE DIGITA

bit.ly/bglugopenscad