
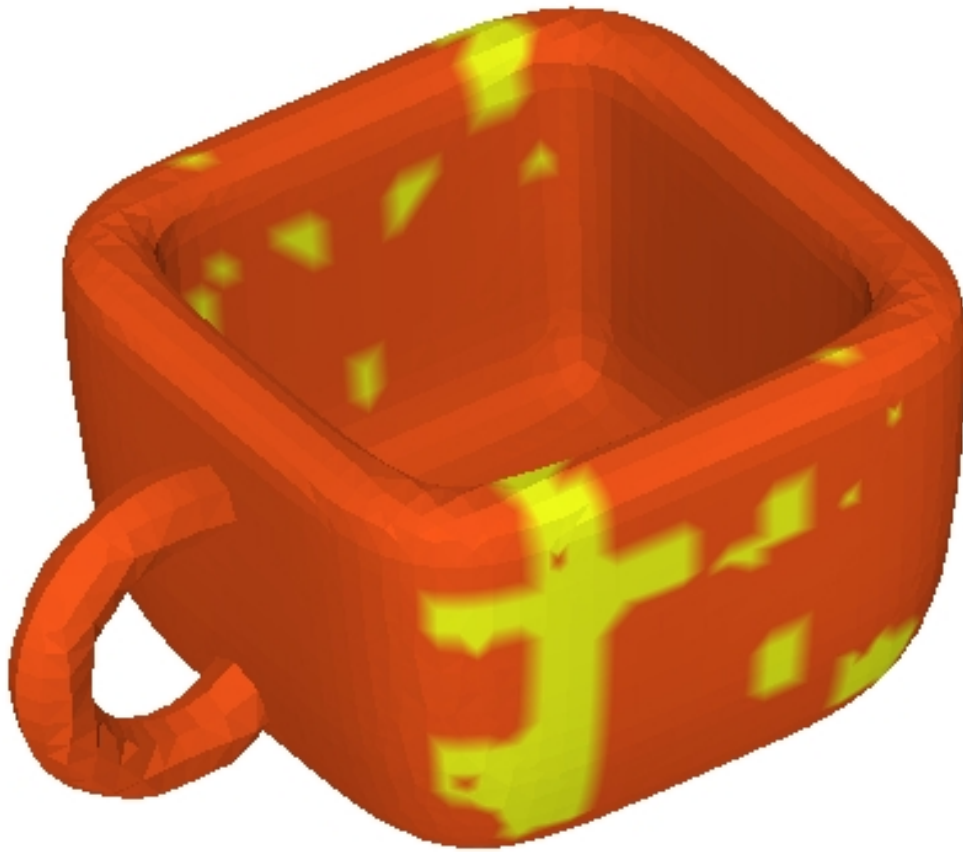


HyperFun

HyperFun is a simple specialized high-level programming language. It is intended for modeling geometric objects and their internal properties (color, material and others). A model can include objects of mixed dimensions (1D, 2D, 3D, 4D and even kD)) defined by real functions of point coordinates. This language is applicable to modeling using algebraic, skeleton-based, and procedural “implicit” surfaces, convolution surfaces, distance-based models, voxel objects, constructive solids and volumes, and more general [FRep](#) objects. A model in HyperFun is interpreted by the modeling, rendering, animation, and fabrication software tools.

More info at hyperfun.org .

Example of HyperFun application:

 Hyperfun application

```
w_cup =  
S5 = mu  
coppu =  
  
-- attribu  
s[1]=0.9  
s[2]=0.3  
s[3]=0.1  
-- space  
sp1 = hf  
-- space  
sp2=-1;  
stepx=2  
stepy=2  
stepz=3  
xc=-6;  
R = 0.8;  
center[1]  
  
while (xc  
yc=0;  
while (y  
sp2 =  
cente  
sp2 =  
cente  
sp2 =  
yc = y  
cente  
endloop  
xc = xc-  
center[1]  
endloop  
if(sp1 >=  
--if(sp2 >  
  
my_mod  
}
```

Model Sp

Enter

Xmin

Ymin

Zmin