

General polygonal mesh generator

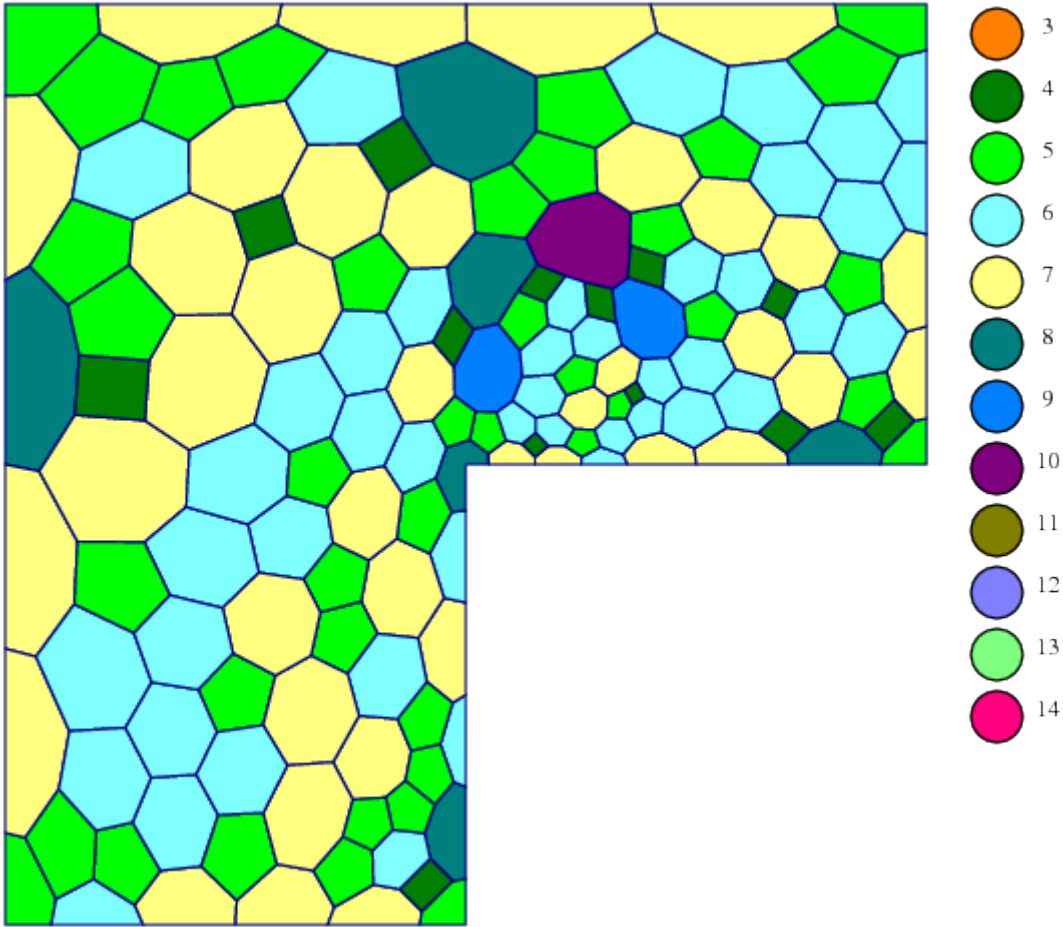
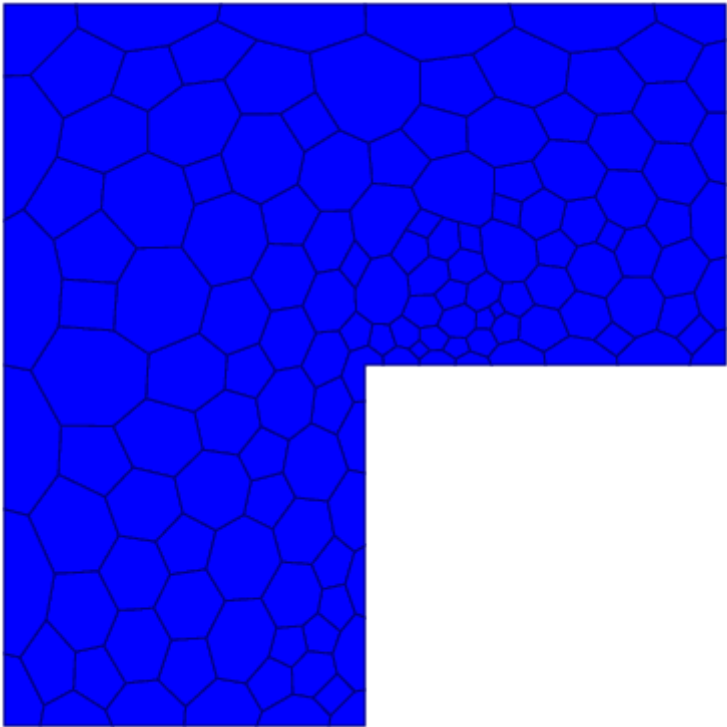
I am sorry, this page is still under construction

For polygonal version of Finite Element Method (with n -gons for $n > 4$) I need appropriate mesh generator. Except for triangle, which produces Voronoi diagrams, no other generator known to me was able to generate general polygonal meshes. So I ended up building one myself. It is heavily based on [MOAB](#) library and [triangle](#) generator. At the moment it is built on “duct tape”, as a proof of concept, but works.



To generate the above mesh I took the following steps:

1. prepare the text image in gimp and save it in pnm format
2. convert the image to fig format using potrace
3. edit the fig file in xfig and manually modify boundary polygons removing duplicated or to close vertices, add markers for holes
4. convert the augmented fig file to triangle input file using Python script based on [fig.py](#) package
5. generate mesh with triangle
6. convert triangular mesh to dual mesh with program based on MOAB library



From:

<https://www.l5.pk.edu.pl/~putanowr/dokuwiki/> - **Roman Putanowicz Wiki**

Permanent link:

<https://www.l5.pk.edu.pl/~putanowr/dokuwiki/doku.php?id=en:projects:nmesh>

Last update: **2017/10/02 15:54**

