# Shape Interrogation for CAD/CAM

## orthoc.c

Find an orthotomic curve for an input open NURBS curve w.r.t. a point P by evaluating an orthotomic curve at a specified (nsegs) number of points on the input curve.

Do:
prompt>  make orthoc
prompt>  orthoc -i input_curve_file   -x x_coord_of_P -y y_coord_of_P -z z_coord_of_P
-n number_of_segments_per_knot_span   -s scale_factor   -o output_file

Output: Resulting orthotomic curve in .VECT format

Example:
**prompt> orthoc -i c.CURV  -x 0.0 -y 0.0 -z 0.0  -n 50  -s 2.0  -o orthoc.VECT**
Note: For the file format of the input curve (c.CURV) and the output (orthoc.VECT), see
[../../README.pdf](../../README.pdf)


## orthos.c

Find an orthotomic surface for an input open NURBS surface w.r.t. a point P by evaluating an orthotomic surface at a specified (nsegu x nsegv) number of points on the input surface.

Do:
prompt> make orthos
prompt> orthos -i input_surface_file   -x x_coord_of_P -y y_coord_of_P -z z_coord_of_P
-m number_of_segments_per_u-knot_span -n number_of_segments_per_v-knot_span   -s
scale_factor   -o output_file

Output: Resulting orthotomic surface in .VECT format

Example:
**prompt> orthos -i s.SURF  -x 0.0 -y 0.0 -z 0.0  -m 20 -n 20  -s 2.0  -o orthos.VECT**
Note: For the file format of the input surface (s.SURF) and the output (orthos.VECT), see
[../../README.pdf](../../README.pdf)