

Graphics 2 exercise classes

Exercise 9

Splines

1. Analyse Matlab script `mySpline.m` which generates a Bezier spline curve defined by four control points. The script uses additional functions (defined in Matlab file `BezierP.m`). Experiment by changing the control points and the increment in parameter u .
2. Enjoy creating interesting spline-patch surfaces using Matlab script `splineSurf.m`. Experiment by changing colours, surface properties (defined by ambient, diffuse and specular coefficients), the size of rectangular grid, etc.
3. Using `mySpline.m` generate a curved path and create animation of a “red car” (represented as a red rectangle) moving along the path.
4. Extend `mySpline.m` to generate 3-dimensional Bezier spline curves. Plot the resulting curves using Matlab function `plot3()`.