[CAD CAE] Lab 2

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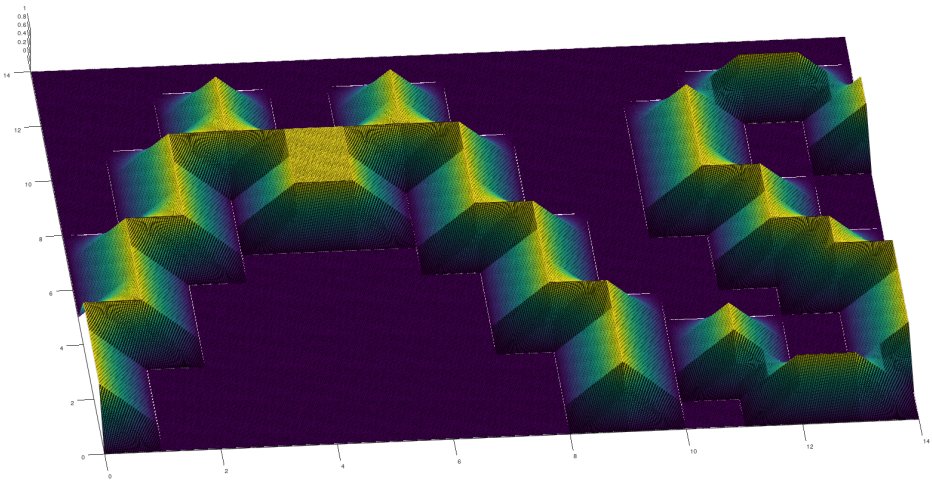
▼ Odlew wynikowy



▼ Zmodyfikowane części kodu

```
knot_vectorx=[ 0 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 ]

knot_vectory=[ 0 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 ]

precision = 0.001
```

```
%X and Y coordinates of points over the 2D mesh
[X,Y]=meshgrid(x,y);

grid_size = 1/precision + 1

sum = zeros(grid_size,grid_size);

coeff = [
          [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
          [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
          [0 0 0 1 0 0 1 0 0 0 0 0 1 1 0 0]
          [0 0 0 1 0 0 1 0 0 0 0 1 0 0 1 0]
          [0 0 1 1 1 1 1 1 0 0 0 1 0 0 1 0]
          [0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0]
          [0 0 1 0 1 1 0 1 0 0 0 1 1 0 0 0]
          [0 1 1 0 0 0 0 1 1 0 0 0 1 0 0 0]
```

```
          [0 1 0 0 0 0 0 0 1 0 0 0 1 1 0]
          [0 1 0 0 0 0 0 0 1 0 0 0 0 1 1]
          [1 1 0 0 0 0 0 0 1 1 0 0 0 0 1]
          [1 0 0 0 0 0 0 0 0 1 0 1 0 0 1]
          [1 0 0 0 0 0 0 0 0 1 0 1 0 0 1]
          [1 0 0 0 0 0 0 0 0 1 0 0 1 1 0]
          [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
          ];

hold on
for i=1:nrx
  %compute values of
  vx=compute_spline(knot_vectorx,px,i,X);
  for j=1:nry
    vy=compute_spline(knot_vectory,py,j,Y);
    sum = sum + coeff(nrx-j+1,i) * vx.*vy;
  end
end
surf(X,Y,sum);
hold off
```