Programming #3: Part I (4190.410)

Due: October 21, 2015

Design an interactive system that can control the shape of a bicubic Bézier surface:

$$S(u, v) = \sum_{i=0}^{3} \sum_{j=0}^{3} \mathbf{p}_{ij} B_i^3(u) B_j^3(v), \quad 0 \le u, v \le 1,$$

by dragging their control points.

Part I: Implement an algorithm for approximating the surface using quadrangles within a given error bound.