Assignments of Advanced Computer Graphics

The homework should be submitted before 2018.05.10 23:59.

Assigned homework #3

9.4 Consider the paths

$$\gamma(t) = (t^2 - 2t + 1, t^3 - 2t^2 + t) \quad \text{and} \quad \eta(t) = (t^2 + 1, t^3),$$

both defined on the interval $0 \le t \le 1$. The curves join, since $\gamma(0) = (1, 0) = \eta(0)$. Show that they meet with C^1 continuity, but not with G^1 continuity. Plot both curves as functions of t to demonstrate exactly why this behavior occurs.

9.13 Let $t_0 = 0$, $t_1 = 1$, $t_2 = 3$, $t_3 = 4$, $t_4 = 5$. Using these values, compute $B_{0,4}$ and each of the functions used in its definition. Then plot these functions on the interval $-3 \le t \le 8$.

Submission:

Report(word/pdf)

File name: Student ID_name_hw2

e.g. 116034910001_张三_hw2

Email for homework submission: cg_sjtu@126.com

Successful submission will receive reply like "Your homework of computer graphics is received."

Attention: Late submission will be scored less grade.