Contents

1 de Casteljau's Method

Consider de Casteljau's method to evaluate a degree n polynomial in Bernstein-Bézier form with control points p_j:

$$\begin{aligned} b_j^{(0)} &= p_j \\ b_j^{(k)} &= (1-x)b_j^{(k-1)} + xb_{j+1}^{(k-1)} \\ b(x) &= b_0^{(n)}. \end{aligned}$$

1.1 K-Fold Error Filtering

Empirically, it seems the process takes

$$(15K^2 - 34K + 26)T_n + K + 5$$

flops to evaluate a degree n polynomial. (Here T_n is the nth triangular number.)