

Monotone Cubic Interpolation

Aresh Pourkavoos

July 2, 2022

Given a set of data points $(x_1, y_1), \dots, (x_n, y_n)$ in which both coordinates strictly increase moving down the list (i.e. $x_1 < \dots < x_n$ and $y_1 < \dots < y_n$), how can we define a function $f(x) = y$ which passes through all points and which is itself strictly increasing (i.e. if $p < q$, then $f(p) < f(q)$)?