Answer on Question #60772-Engineering-Other

How the degree of polynomial in continuous path is estimated with its acceleration and velocity

Answer

If the acceleration is constant but the velocity is not a constant the degree of polynomial is 2:

$$P_2(t) = At^2 + Bt + C.$$

If the acceleration is zero and the velocity is a constant the degree of polynomial is 1:

$$P_1(t) = At + B.$$

If the acceleration is zero and the velocity is zero the degree of polynomial is o:

$$P_0(t) = A.$$