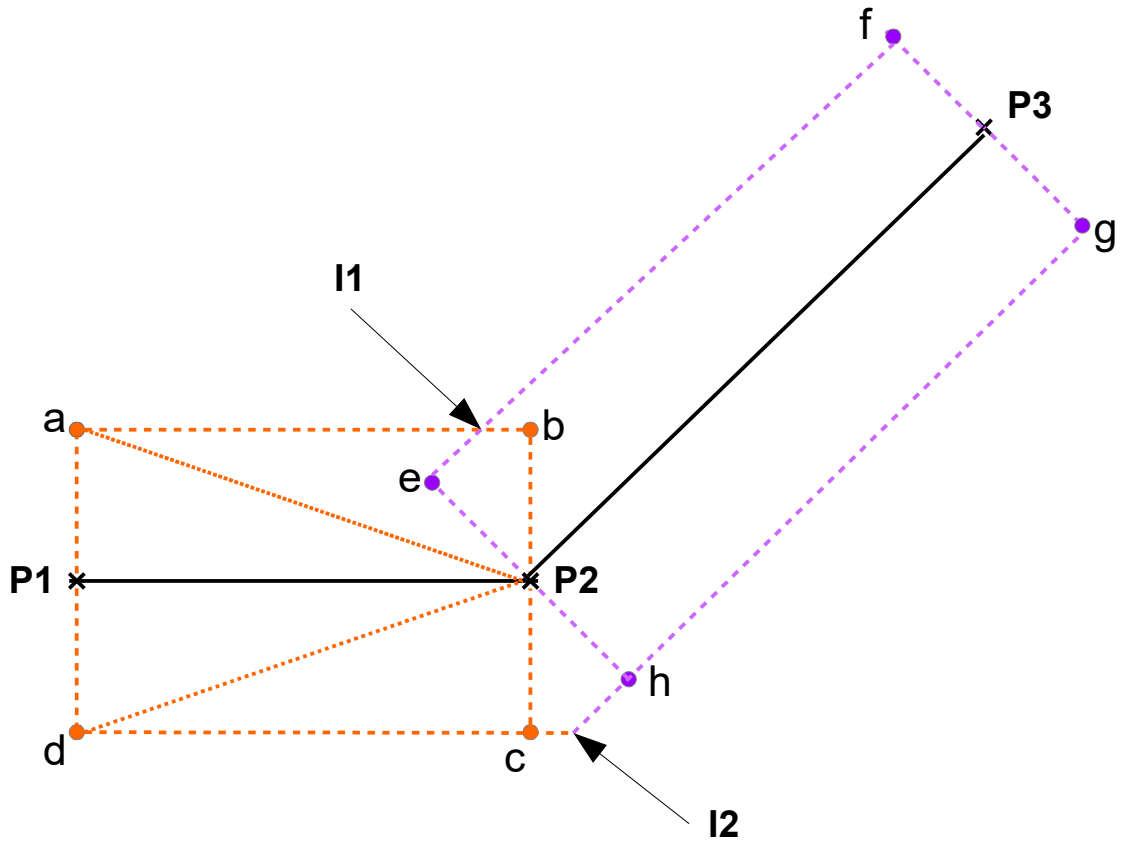
Antialiased lines on OpenGL



a,b,c,d coordinates are computed from P1 and P2 coordinates using normal and the desired line width.
Similarly e,f,g,h coordinates are computed from P2 and P3 coordinates using normals and the desired line width.
After that, we compute (ab) and (ef) line equations and the coordinates of their intersection point I1.
Similarly, from (dc) and (hg) line equations we compute the coordinates of their intersection point I2.
Under OpenGL, we draw the triangle (a,I1,P2) then (a,P2,P1) then (P1,P2,d) and finally (d, I2, P2).
The antialiasing is obtained by applying an alpha value near of 0 on the vertices a, I1, d and I2. On vertices P1 and P2 the alpha value is equal to 1.