CSCI 4458 | CSCI 5558
HW 04 - Transforms Assignment II

Assigned: October 07, 2019
Due: October 21, 2019 @ 23:00h

Purpose

Problem Statement

Part 1 (2 points each)

Three points are defined by $P_1 = (2, 4, -1)$, $P_2 = (2, 6, 1)$, and $P_3 = (3, 5, 3)$.

1. Use dot product to compute the angle $P_1P_2P_3$ (i.e., the angle at P_2 defined by the three points).
2. Use cross product to compute a normal vector to the plane defined by the three points.
3. Give both unit normal vectors to this plane. If the points P_1, P_2, and P_3 are in counterclockwise order, specify which unit normal is pointing up from the surface.
4. Use a normal vector and one of the points to determine the planar equation for this plane.

Assignment

Submission