

# [16-833] Homework 4 : Written Report

Bharath Somayajula

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## 1 Iterative Closest Point

### 1.1 Projective Data Association

For a source point to have a valid correspondence in target vertex map, it's projected coordinates must fall within the bounds of the vertex map and have a positive depth. Therefore, assuming that the  $u, v$  coordinates are rounded to integers and the height and width are zero-indexed, we get:

$$0 \leq u < W$$

$$0 \leq v < H$$

$$d > 0$$