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Triangle intersection: clarification

Carlos Gálvez del Postigo Fernández Configuration Space (/learn/robotics-motion-planning/module/EDk8Q/discussions) · 4 days ago (/learn/robotics-motion-planning/discussions/L3VSFNfSEeWsaAqtPzxiow)

I only manage to get 11/15 points in my triangle intersection code, so I guess there are some extreme cases I have not considered.

I would like to ask:

- If one vertex of the triangle lies exactly on the edge of the other triangle, is that considered to be intersecting?
- If two triangles share 2 points (for example, when a square is splitted into two triangles), are those considered to be intersecting?
- Do we need to consider degenerate triangles, which are in fact lines or points?

Thanks.

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一敏 葛 · 4 days ago (/learn/robotics-motion-planning/discussions/L3VSFNfSEeWsaAqtPzxiow/replies/uEg-gtfbEeW01g7o8S6alw)

1. yes
2. yes
3. if you consider above 2 cases , this one is included. however It was no bother , just aignore this situation.

Besides, you can check this link https://www.coursera.org/learn/robotics-motion-planning/module/EDk8Q/discussions/iLbv5de5EeW9ug73QL_FVQ (https://www.coursera.org/learn/robotics-motion-planning/module/EDk8Q/discussions/iLbv5de5EeW9ug73QL_FVQ). It may help.

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Selvaraj S · 3 days ago (/learn/robotics-motion-planning/discussions/L3VSFNfSEeWsaAqtPzxiow/replies/4PSCS9hyEeWwoQrbIHhKaQ)

obtain area of triangle we can find out wheather a point is inside the triange or outside by equatiing area of traingle and sum of 3 triangles formed by point as vertex. if areas equal point is inside otherwise outside. for this we require new fuction that takes coordinates

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Yuan Gao · 8 hours ago (/learn/robotics-motion-planning/discussions/L3VSFNfSEeWsaAqtPzxiow/replies/4PSCS9hyEeWwoQrbIHhKaQ/comments/kWZ7mNqwEeWckg6uCoXYkQ)

I did this problem using this method, however I only get 11/15..... Do you get 15/15?

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