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1 function build_inconsistency_list(edge_list, G, property):
2 // insertions
3 for each e in edge_list
4     VertexProperty[e.src].tri_count = 0
5     VertexProperty[e.dst].tri_count = 0
6     inconsistency_list =
7     inconsistency_list U {e.src, e.dst, DEFAULT_PRIORITY}
8     G' = G' U (e.src, e.dst)
9     for each neighbor x of e.src
10         inconsistency_list =
11         inconsistency_list U {x, DEFAULT_PRIORITY}
12         G' = G' U (e.src, x)
13     for each neighbor y of e.dst
14         inconsistency_list =
15         inconsistency_list U {y, DEFAULT_PRIORITY}
16         G' = G' U (e.dst, y)
17 return (inconsistency_list, G')
18
19 function property_guard(degree: DE, threshold_fraction f):
20 if fraction of inconsistent vertices with
21 (degree > DE > n*f) > f
22     run static re-computation
23 else run incremental algorithm
24
25 function frontier_activate(G', inconsistency_list):
26 // Using extract operation on inconsistency_list
27 for every edge e in G'
28     activate(e.src)
29     activate(e.dst)
30
31 function update_inconsistency_list(G', inconsistency_list,
32 new_inconsistency=NULL)
33 if (G.activity.empty())
34     inconsistency_list.clear()
35
36 // I-GAS computation loop
37 function I-GAS(inconsistency_list, G'):
38 While (!inconsistency_list.empty())
39     if (itr == 1)
40         frontier_activate(G', inconsistency_list)
41     Modified-GAS(G')
42     update_inconsistency_list(G', inconsistency_list)
43
44 function merge_state(inconsistency_list):
45 for each v in inconsistency_list
46     VertexProperty[v].tri_count += tri_count_old

```