

Application	EvoGraph Computation Phases and APIs						
		Phase I	Phase II	Phase III	Phase IV		Phase V
	Type	<i>meta_computation()</i>	<i>build_inconsistency_list()</i>	<i>property_guard()</i>	<i>frontier_activate()</i>	<i>update_inconsistency_list()</i>	<i>merge_state()</i>
Breath-First Search (BFS)	Stateful	Parent id and vertex degree	1. Inconsistency list contains vertices with incorrect depth values with MIN_PRIORITY. 2. $G' = G$	Check BFS depth property	Activate inconsistent vertices with minimum depth value	Remove frontier vertices and add inconsistent successors to inconsistency list	1. Apply all insertions and deletions to G.
Connected Components (CC)	Partially-Stateless	Vertex degree	1. For each edge insertion add an edge in $G'$ if the endpoints belong to different components. 2. $G'$ is also known as component graph.	Check disjoint component property	Activate all the vertices in $G'$	Clear inconsistency list	1. Apply only deletions to G. 2. Relabel components in G using $G'$
Triangle Counting (TC)	Fully-Stateless	Vertex degree	1. Inconsistency list contains endpoints of every edge inserted and/or deleted and their respective neighbors. 2. $G'$ consists of inconsistent vertices and edge incident on them in G.	Check vertex degree property	Activate all the vertices in $G'$	Clear inconsistency list	1. Applying insertions and deletions to G not required 2. Update triangle counts and degree information in G using $G'$