

## Coordinator

Generate high-level graph path between  $src$  &  $tgt$  ( $hlp$ ).

**Send:**

$hlp[i - 1], hlp[i], hlp[i + 1]$

**Recv:** collision messages between threads.

**When:** enough collisions registered.

**Send:** stop msg.

Generate collision graph path ( $cgp$ )

**Send:**  $cgp[i], cgp[i + 1]$

**Recv:** intermediate path between collisions.

Concatenate intermediate paths from  $src$  to  $tgt$  for the overall path.

## Search Thread 'i'

**Recv:** Vertices for fringe search ( $t_1, s, t_2$ ).

Search towards target  $t_{1|2}$  claiming vertices with no owner.

**When:** vertex is  $t_{1|2}$  or owned by another thread.

**Send:** collision msg to coordinator **if** vertex is not  $t_{1|2}$ .

**Update:** search heuristic to target second goal.

**Recv:** stop msg.

**Recv:** Endpoints for fringe search ( $s, t$ ).

Search for path between  $s$  &  $t$  using only personally owned vertices.

**Send:** final path msg.