ALGORITHM 4: *Segmentation*(G, $PASS$, <V,R>)

```
1: Initialize actor to segment assignments <V,S>, as each actor occupies a separate segment
2: min_overlay ← calOverlay(G, PASS, <V,R>, <V,S>)
3: for each region r ∈ R do
4:    for each segment pair (s_i, s_j), where s_i, s_j ∈ R, i < j do
5:       if collapsing s_i and s_j does not violate region size then
6:          Update <V,S>
7:          overlay ← calOverlay(G, PASS, <V,R>, <V,S>)
8:          if overlay < min_overlay then
9:             min_overlay ← overlay
10:         else
11:            Restore <V,S> to the previous state where s_i and s_j were not collapsed
12:         end if
13:      end if
14:   end for
15: end for
16: return <V,S>
```