
Algorithm 2 DSPG Local checker

Require: a dictionary $nodesToPNPS$ (keys are nodes and values are PNPS), a node src and a node $target$

if there is a path from src to $target$ **then**
 $pathNodes \leftarrow$ list of all intermediate nodes in this path
else
 return {bool: False}
end if

if $nodeToPNPS[src] \neq None$ **then**
 if $target \notin nodeToPNPS[src]$ **then**
 return {bool: False}
 end if
end if

if $nodeToPNPS[target] \neq None$ **then**
 if $src \notin nodeToPNPS[target]$ **then**
 return {bool: False}
 end if
end if

return {bool: True, intermediateNodes: $pathNodes$ }
