Algorithm 1 Parse Simulink model data

> **INPUT:** source path of slx or mdl model files
> **OUTPUT:** json data files

1: Prepare the list for all the slx or mdl files
2: **for** each file in the list **do**
3:     create a model node that represents the model
4:     read the blocks from the model
5:     **for** each block in the list **do**
6:         create a block node that represents the block
7:         create a block-model relationship that represents the block with model
8:     **end for**
9:     read the ports from the model
10:     **for** each port in the list **do**
11:         create a port node that represents the port
12:         create a port-block relationship that represents the port with block
13:     **end for**
14:     read the lines from the model
15:     **for** each line in the list **do**
16:         create a port-to-port node relationship that represents the model line/signal
17:     **end for**
18:     create a json data file for each model
19: **end for**