Interactive Bayesian Network Strength Viewer

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Show the strength of the probabilistic relationships expressed by the arcs of a Bayesian network, and use model averaging to build a network containing only the significant arcs.

Install from GitHub.

```
install.packages("devtools")
devtools::install_github("robson-fernandes/bnviewer")
```

Example

```
library(bnlearn)
library(bnviewer)

data("coronary")
bayesianNetwork.boot.strength = boot.strength(coronary, R = 10,
                                              algorithm = "hc",
                                              nrow(data),
                                              cpdag = TRUE,
                                              debug = FALSE)

bayesianNetwork.boot.strength[(bayesianNetwork.boot.strength$strength > 0.95) &
                              (bayesianNetwork.boot.strength$direction >= 1), ]

avg.bayesianNetwork = averaged.network(bayesianNetwork.boot.strength)


strength.viewer(
  avg.bayesianNetwork,
  bayesianNetwork.boot.strength,

  bayesianNetwork.arc.strength.threshold.expression.color = "@threshold >= 0.95 & @threshold <= 1",
  bayesianNetwork.arc.strength.threshold.color = "#f4bafd",

  bayesianNetwork.arc.strength.label = TRUE,
  bayesianNetwork.arc.strength.label.prefix = "",
  bayesianNetwork.arc.strength.label.color = "black",

  bayesianNetwork.arc.strength.tooltip = TRUE,

  bayesianNetwork.edge.scale.min = 1,
  bayesianNetwork.edge.scale.max = 5,
```

```
  bayesianNetwork.edge.scale.label.min = 14,
  bayesianNetwork.edge.scale.label.max = 14,

  bayesianNetwork.width = "100%",
  bayesianNetwork.height = "800px",
  bayesianNetwork.layout = "layout_with_sugiyama",
  node.colors = list(background = "#97c2fc",
                     border = "#2b7ce9",
                     highlight = list(background = "#f4bafd",
                                      border = "#2b7ce9")),
  edges.dashes = TRUE
)
```

Output