IMDB Summary Chart

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Import summary table from previous exploratory analysis:

Plot out results for single hidden layer versus number of nodes and drop out rate:

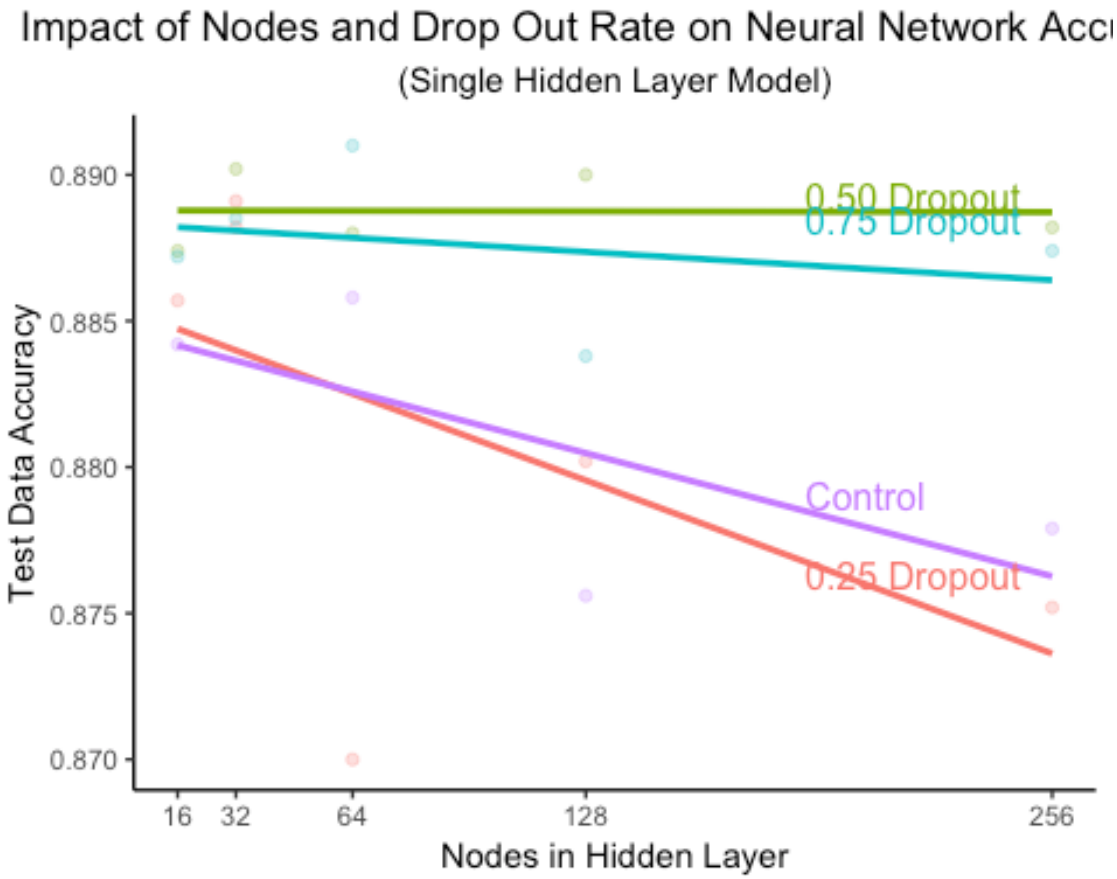
```
require(ggplot2)

## Loading required package: ggplot2

require(directlabels)

## Loading required package: directlabels

ggplot(subset(Summary_Results_Table,`Hidden Layers` %in% c("1")), aes(x =
`Nodes per Layer`, y = `Test Accuracy`, color = `Drop Out Rate`, group =
`Drop Out Rate`)) +
  geom_point(alpha = 0.25) +
  geom_smooth(method = "lm", se = FALSE) +
  theme_classic() +
  theme(legend.position = "none", plot.title = element_text(hjust = 0.5),
plot.subtitle = element_text(hjust = 0.5)) +
  scale_x_continuous(breaks = c(16,32,64,128,256)) +
  xlab("Nodes in Hidden Layer") +
  ylab("Test Data Accuracy") +
  labs(title = "Impact of Nodes and Drop Out Rate on Neural Network
Accuracy", subtitle = "(Single Hidden Layer Model)") +
  geom_dl(aes(label = `Drop Out Rate`), method = list(dl.trans(x = x - 2.8, y
= y + 0.36), "last.points"), cex = 0.8)
```


Impact of Nodes and Drop Out Rate on Neural Network Acc
(Single Hidden Layer Model)
Test Data Accuracy
0.890
0.885
0.880
0.875
0.870
0.50 Dropout
0.75 Dropout
Control
0.25 Dropout
16
32
64
128
256
Nodes in Hidden Layer