

nnCoreV1 V.S. nnCoreV2

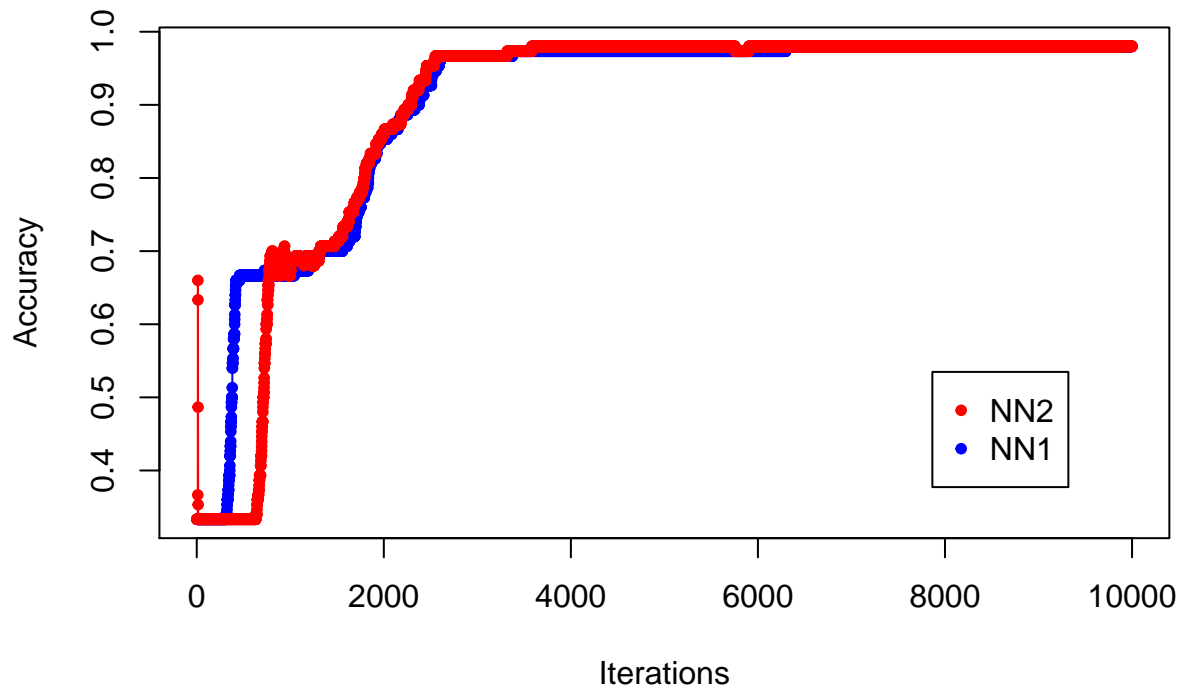
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Iris Dataset

```
library(nnCore)
# Iris
irisNN1 <- nnCoreV1$new(Species ~ ., data = iris, hidden = 6)
suppressMessages(irisNN1$train(9999, trace = 1e3, learn_rate = .0001))

irisNN2 <- nnCoreV2$new(Species ~ ., data = iris, hidden = 6, plotData = T)
suppressMessages(irisNN2$train(9999, trace = 1e3, learn_rate = .0001))
compareNN(irisNN1, irisNN2)
```



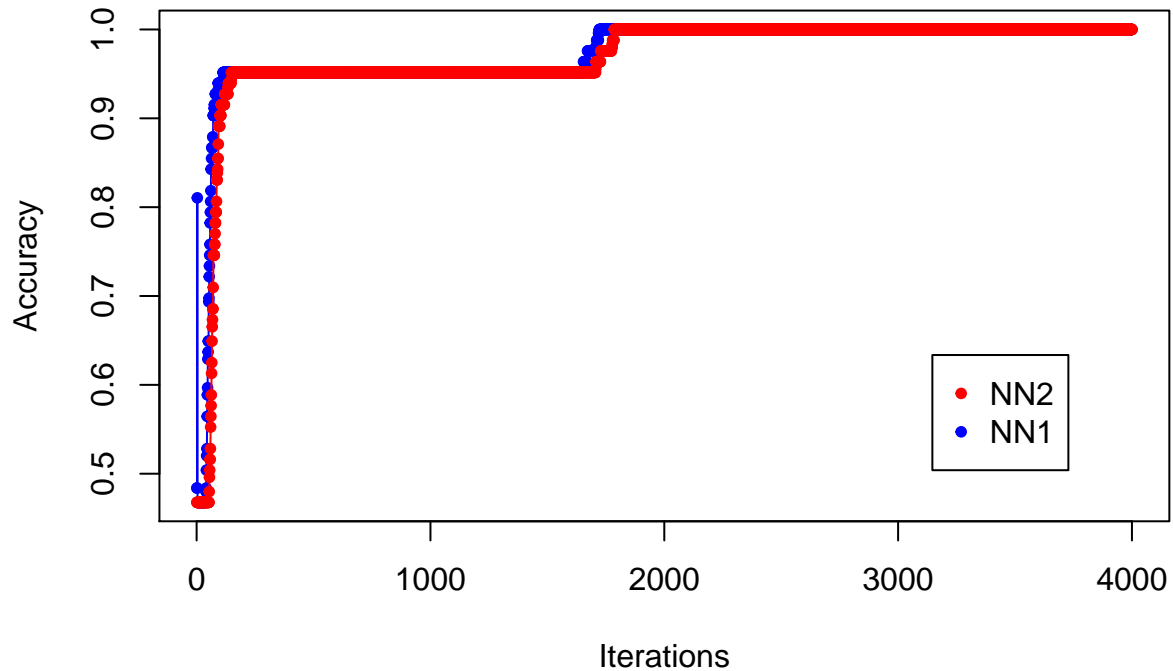
Infert Dataset

```
# infertility
infertNN1 <- nnCoreV1$new(education ~ ., data= infert, hidden = 6)
suppressMessages(infertNN1$train(4000, trace = 1e3, learn_rate = .0001))
```

```

infertNN2 <- nnCoreV2$new(education ~ ., data= infert, hidden = 6, plotData = T)
suppressMessages(infertNN2$train(4000, trace = 1e3, learn_rate = .0001))
compareNN(infertNN1, infertNN2)

```



Higgs Boson Prediction

```

# Higgs Boson Prediction
higgsDat <- read.csv("C:/Users/hsamuelson/Desktop/R/Higgs/training/training.csv")
higgsDat <- higgsDat[,-1]

higgsNN1 <- nnCoreV1$new(Label ~ ., data= higgsDat[1:150,], hidden = 30)
suppressMessages(higgsNN1$train(9999, trace = 1e3, learn_rate = .0001))

higgsNN2 <- nnCoreV2$new(Label ~ ., data= higgsDat[1:150,], hidden = 30, plotData = T)
suppressMessages(higgsNN2$train(9999, trace = 1e3, learn_rate = .0001))
compareNN(higgsNN1, higgsNN2)

```

