1. Which is the most valuable defensive line position? You can define the positions however you like.

* Clustering them using mini max
* Likelihood Values for DE or DT with Random Forest Regressions

Defining Positions:

Clustering by Technique, Position, Side, Physicals, etc.

* + 1. K-Means, Hierarchical, Density Based, Model Based

Random Forest Regression Thingy for probability values of each position

Evaluating Positions:

Using a ridge regression

Predict: EPA, Pressure, Tackle for Loss, Pressure, etc.

Cluster Tendencies or Cluster Characteristics

1. What is the nature of the distribution of talent between the defensive line positions, as you define them?
2. Not all situations are created equal. In which in-game or roster construction scenarios would the answer to Question 1 change?
   1. Quarter Breakdown
   2. One score game in the 4th quarter
   3. Run versus Pass
   4. Fast Paced (Last 2 Minutes of a half)
   5. Blowout (21 or 28 Point Lead)

Pressureridgedata <- groupedeventdata %>% select(c(Pressure, Name.1, Name.2, Name.3, Name.4, Name.5, Name.6, Name.7, Name.8, Name.9, Name.10))

Pressureridgedata$Pressure <- as.numeric(Pressureridgedata$Pressure)

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.1")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.2")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.3")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.4")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.5")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.6")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.7")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.8")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.9")

Pressureridgedata <- fastDummies::dummy\_cols(Pressureridgedata, select\_columns = "Name.10")

Pressureridgedata <- Pressureridgedata %>% select(-c(Name.1, Name.2, Name.3, Name.4, Name.5, Name.6, Name.7, Name.8, Name.9, Name.10))

colnames(Pressureridgedata) <- sub("Name.1\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.2\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.3\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.4\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.5\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.6\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.7\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.8\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.9\_", "", colnames(Pressureridgedata))

colnames(Pressureridgedata) <-sub("Name.10\_", "", colnames(Pressureridgedata))

Pressureridgedata <- sapply(split.default(Pressureridgedata, names(Pressureridgedata)), rowSums, na.rm = TRUE)

Pressureridgedata <- as.data.frame(Pressureridgedata)

Pressureridgedata <- Pressureridgedata %>% select(Pressure, everything())

Pressureridgedata

linearRidge(Pressure~., Pressureridgedata) -> Pressureridge

Pressureridge

Pressurecoef <- data.frame(coef(Pressureridge))

write\_csv(Pressureridgedata, "Pressureridgedata.csv")

write\_csv(Pressurecoef, "Pressurecoefdata.csv")