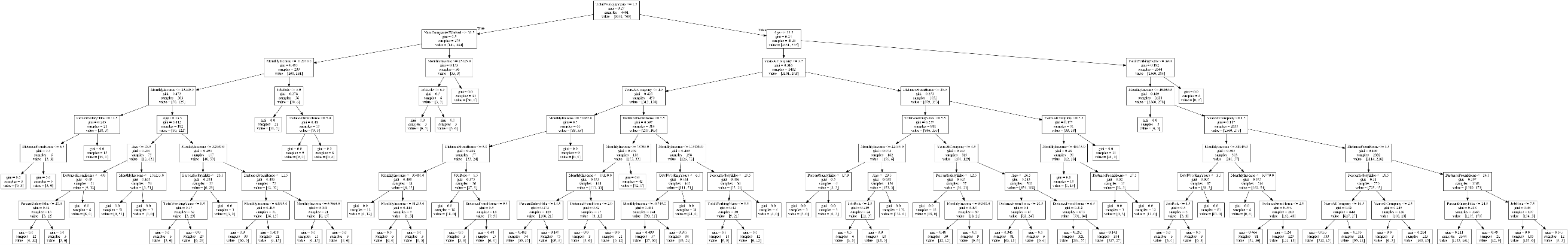
**Attrition Analysis**

Here we have first used Random Forest and to know its important features and then we have used Decision Tree for getting the Decision Tree and Afterwards visualizing it.



Pseudo rule of making this decision tree diagram is

|--- TotalWorkingYears <= 1.50

| |--- NumCompaniesWorked <= 33.50

| | |--- MonthlyIncome <= 112610.00

| | | |--- MonthlyIncome <= 23140.00

| | | | |--- PercentSalaryHike <= 12.50

| | | | | |--- DistanceFromHome <= 6.50

| | | | | | |--- class: 1

| | | | | |--- DistanceFromHome > 6.50

| | | | | | |--- class: 0

| | | | |--- PercentSalaryHike > 12.50

| | | | | |--- class: 0

| | | |--- MonthlyIncome > 23140.00

| | | | |--- Age <= 23.50

| | | | | |--- Age <= 18.50

| | | | | | |--- DistanceFromHome <= 4.00

| | | | | | | |--- PercentSalaryHike <= 20.00

| | | | | | | | |--- class: 1

| | | | | | | |--- PercentSalaryHike > 20.00

| | | | | | | | |--- class: 0

| | | | | | |--- DistanceFromHome > 4.00

| | | | | | | |--- class: 0

| | | | | |--- Age > 18.50

| | | | | | |--- MonthlyIncome <= 106255.00

| | | | | | | |--- class: 1

| | | | | | |--- MonthlyIncome > 106255.00

| | | | | | | |--- class: 0

| | | | |--- Age > 23.50

| | | | | |--- MonthlyIncome <= 32530.00

| | | | | | |--- PercentSalaryHike <= 23.50

| | | | | | | |--- TotalWorkingYears <= 0.50

| | | | | | | | |--- class: 0

| | | | | | | |--- TotalWorkingYears > 0.50

| | | | | | | | |--- class: 1

| | | | | | |--- PercentSalaryHike > 23.50

| | | | | | | |--- class: 0

| | | | | |--- MonthlyIncome > 32530.00

| | | | | | |--- DistanceFromHome <= 11.50

| | | | | | | |--- MonthlyIncome <= 63965.00

| | | | | | | | |--- class: 0

| | | | | | | |--- MonthlyIncome > 63965.00

| | | | | | | | |--- class: 1

| | | | | | |--- DistanceFromHome > 11.50

| | | | | | | |--- MonthlyIncome <= 64960.00

| | | | | | | | |--- class: 1

| | | | | | | |--- MonthlyIncome > 64960.00

| | | | | | | | |--- class: 0

| | |--- MonthlyIncome > 112610.00

| | | |--- JobRole <= 5.00

| | | | |--- class: 0

| | | |--- JobRole > 5.00

| | | | |--- DistanceFromHome <= 5.00

| | | | | |--- class: 0

| | | | |--- DistanceFromHome > 5.00

| | | | | |--- class: 1

| |--- NumCompaniesWorked > 33.50

| | |--- MonthlyIncome <= 25425.00

| | | |--- JobRole <= 6.50

| | | | |--- class: 1

| | | |--- JobRole > 6.50

| | | | |--- class: 0

| | |--- MonthlyIncome > 25425.00

| | | |--- class: 0

|--- TotalWorkingYears > 1.50

| |--- Age <= 33.50

| | |--- YearsAtCompany <= 3.50

| | | |--- YearsAtCompany <= 1.50

| | | | |--- MonthlyIncome <= 70465.00

| | | | | |--- DistanceFromHome <= 5.00

| | | | | | |--- MonthlyIncome <= 35480.00

| | | | | | | |--- class: 1

| | | | | | |--- MonthlyIncome > 35480.00

| | | | | | | |--- MonthlyIncome <= 51235.00

| | | | | | | | |--- class: 0

| | | | | | | |--- MonthlyIncome > 51235.00

| | | | | | | | |--- class: 1

| | | | | |--- DistanceFromHome > 5.00

| | | | | | |--- JobRole <= 6.50

| | | | | | | |--- class: 0

| | | | | | |--- JobRole > 6.50

| | | | | | | |--- DistanceFromHome <= 9.50

| | | | | | | | |--- class: 0

| | | | | | | |--- DistanceFromHome > 9.50

| | | | | | | | |--- class: 1

| | | | |--- MonthlyIncome > 70465.00

| | | | | |--- class: 1

| | | |--- YearsAtCompany > 1.50

| | | | |--- DistanceFromHome <= 7.50

| | | | | |--- MonthlyIncome <= 73705.00

| | | | | | |--- MonthlyIncome <= 59150.00

| | | | | | | |--- PercentSalaryHike <= 13.50

| | | | | | | | |--- class: 0

| | | | | | | |--- PercentSalaryHike > 13.50

| | | | | | | | |--- class: 0

| | | | | | |--- MonthlyIncome > 59150.00

| | | | | | | |--- DistanceFromHome <= 2.00

| | | | | | | | |--- class: 0

| | | | | | | |--- DistanceFromHome > 2.00

| | | | | | | | |--- class: 1

| | | | | |--- MonthlyIncome > 73705.00

| | | | | | |--- class: 0

| | | | |--- DistanceFromHome > 7.50

| | | | | |--- MonthlyIncome <= 115880.00

| | | | | | |--- TotalWorkingYears <= 6.50

| | | | | | | |--- MonthlyIncome <= 34745.00

| | | | | | | | |--- class: 1

| | | | | | | |--- MonthlyIncome > 34745.00

| | | | | | | | |--- class: 0

| | | | | | |--- TotalWorkingYears > 6.50

| | | | | | | |--- class: 0

| | | | | |--- MonthlyIncome > 115880.00

| | | | | | |--- PercentSalaryHike <= 19.50

| | | | | | | |--- TotalWorkingYears <= 5.50

| | | | | | | | |--- class: 0

| | | | | | | |--- TotalWorkingYears > 5.50

| | | | | | | | |--- class: 1

| | | | | | |--- PercentSalaryHike > 19.50

| | | | | | | |--- class: 0

| | |--- YearsAtCompany > 3.50

| | | |--- DistanceFromHome <= 26.50

| | | | |--- TotalWorkingYears <= 5.50

| | | | | |--- MonthlyIncome <= 22455.00

| | | | | | |--- PercentSalaryHike <= 17.00

| | | | | | | |--- class: 0

| | | | | | |--- PercentSalaryHike > 17.00

| | | | | | | |--- class: 1

| | | | | |--- MonthlyIncome > 22455.00

| | | | | | |--- Age <= 23.50

| | | | | | | |--- JobRole <= 2.50

| | | | | | | | |--- class: 0

| | | | | | | |--- JobRole > 2.50

| | | | | | | | |--- class: 0

| | | | | | |--- Age > 23.50

| | | | | | | |--- class: 0

| | | | |--- TotalWorkingYears > 5.50

| | | | | |--- YearsAtCompany <= 4.50

| | | | | | |--- PercentSalaryHike <= 12.50

| | | | | | | |--- class: 0

| | | | | | |--- PercentSalaryHike > 12.50

| | | | | | | |--- MonthlyIncome <= 93300.00

| | | | | | | | |--- class: 0

| | | | | | | |--- MonthlyIncome > 93300.00

| | | | | | | | |--- class: 1

| | | | | |--- YearsAtCompany > 4.50

| | | | | | |--- Age <= 26.50

| | | | | | | |--- DistanceFromHome <= 20.50

| | | | | | | | |--- class: 0

| | | | | | | |--- DistanceFromHome > 20.50

| | | | | | | | |--- class: 1

| | | | | | |--- Age > 26.50

| | | | | | | |--- DistanceFromHome <= 6.50

| | | | | | | | |--- class: 0

| | | | | | | |--- DistanceFromHome > 6.50

| | | | | | | | |--- class: 0

| | | |--- DistanceFromHome > 26.50

| | | | |--- YearsAtCompany <= 7.50

| | | | | |--- MonthlyIncome <= 46375.00

| | | | | | |--- class: 1

| | | | | |--- MonthlyIncome > 46375.00

| | | | | | |--- DistanceFromHome <= 27.50

| | | | | | | |--- class: 1

| | | | | | |--- DistanceFromHome > 27.50

| | | | | | | |--- class: 0

| | | | |--- YearsAtCompany > 7.50

| | | | | |--- class: 0

| |--- Age > 33.50

| | |--- TotalWorkingYears <= 39.00

| | | |--- MonthlyIncome <= 10300.00

| | | | |--- class: 1

| | | |--- MonthlyIncome > 10300.00

| | | | |--- YearsAtCompany <= 1.50

| | | | | |--- MonthlyIncome <= 34145.00

| | | | | | |--- TotalWorkingYears <= 3.50

| | | | | | | |--- JobRole <= 4.50

| | | | | | | | |--- class: 0

| | | | | | | |--- JobRole > 4.50

| | | | | | | | |--- class: 1

| | | | | | |--- TotalWorkingYears > 3.50

| | | | | | | |--- class: 0

| | | | | |--- MonthlyIncome > 34145.00

| | | | | | |--- MonthlyIncome <= 36770.00

| | | | | | | |--- class: 1

| | | | | | |--- MonthlyIncome > 36770.00

| | | | | | | |--- DistanceFromHome <= 2.50

| | | | | | | | |--- class: 0

| | | | | | | |--- DistanceFromHome > 2.50

| | | | | | | | |--- class: 0

| | | | |--- YearsAtCompany > 1.50

| | | | | |--- DistanceFromHome <= 3.50

| | | | | | |--- PercentSalaryHike <= 18.50

| | | | | | | |--- YearsAtCompany <= 16.50

| | | | | | | | |--- class: 0

| | | | | | | |--- YearsAtCompany > 16.50

| | | | | | | | |--- class: 0

| | | | | | |--- PercentSalaryHike > 18.50

| | | | | | | |--- YearsAtCompany <= 2.50

| | | | | | | | |--- class: 1

| | | | | | | |--- YearsAtCompany > 2.50

| | | | | | | | |--- class: 0

| | | | | |--- DistanceFromHome > 3.50

| | | | | | |--- DistanceFromHome <= 24.50

| | | | | | | |--- PercentSalaryHike <= 24.50

| | | | | | | | |--- class: 0

| | | | | | | |--- PercentSalaryHike > 24.50

| | | | | | | | |--- class: 0

| | | | | | |--- DistanceFromHome > 24.50

| | | | | | | |--- JobRole <= 7.50

| | | | | | | | |--- class: 0

| | | | | | | |--- JobRole > 7.50

| | | | | | | | |--- class: 0

| | |--- TotalWorkingYears > 39.00

| | | |--- class: 1