

```
> source('~/.active-rstudio-document', echo=TRUE)
```

```
> y = glm(ACTION ~ ., data=train, family=binomial)
```

```
> summary(y)
```

Call:

```
glm(formula = ACTION ~ ., family = binomial, data = train)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-2.9710	0.3393	0.3458	0.3502	0.5809

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	3.672e-01	1.057e+00	0.347	0.72837
RESOURCE	-3.821e-08	6.918e-07	-0.055	0.95596
MGR_ID	-4.873e-07	6.473e-07	-0.753	0.45153
ROLE_ROLLUP_1	-6.269e-06	2.560e-06	-2.449	0.01434
ROLE_ROLLUP_2	4.066e-06	4.513e-06	0.901	0.36756
ROLE_DEPTNAME	1.436e-07	1.268e-06	0.113	0.90981
ROLE_TITLE	-1.636e-06	7.029e-07	-2.327	0.01996
ROLE_FAMILY_DESC	2.464e-07	3.555e-07	0.693	0.48827
ROLE_FAMILY	1.838e-07	2.452e-07	0.750	0.45337
ROLE_CODE	2.346e-05	7.241e-06	3.240	0.00119

```

(Intercept)
RESOURCE
MGR_ID
ROLE_ROLLUP_1  *
ROLE_ROLLUP_2
ROLE_DEPTNAME
ROLE_TITLE    *
ROLE_FAMILY_DESC
ROLE_FAMILY
ROLE_CODE     **
---

```

Signif. codes:

```

0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 14492 on 32768 degrees of freedom

Residual deviance: 14464 on 32759 degrees of freedom

AIC: 14484

Number of Fisher Scoring iterations: 6

```
> predictX = predict(y, type="response")
```

```
> table(train$ACTION, predictX > 0.5)
```

```
TRUE
```

```
0 1897
```

```
1 30872
```

```
> library("ROCR")
```

```
> ROCRpred = prediction(predictX, train$ACTION)
```

```
> auc = as.numeric(performance(ROCRpred, "auc")@y.values)
```

```
> ROCRperf = performance(ROCRpred, "tpr", "fpr")
```

```
> plot(ROCRperf)
```

```
> predictTest = predict(ResourceLog1, type="response", newdata=test)
```

```
> summary(predictTest)
```

```
Min. 1st Qu. Median Mean 3rd Qu. Max.
```

```
0.8504 0.9405 0.9412 0.9420 0.9427 0.9977
```

```
>
```