

Code and Output for the GLM Regression-Based Prediction Model

```
> patent <- read.csv("patents.csv")
> patent.glm <- glm(status ~ examinerInterviews + foreign + RCE, family = binomial(logit), data
= patent)
> summary(patent.glm)
```

```
Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.2851   0.3887   0.4270   0.5350   1.8050

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)    3.00566    0.23074   13.026 < 2e-16 ***
examinerInterviews 1.31914    0.31048    4.249 2.15e-05 ***
foreign        -0.47723    0.22444   -2.126  0.0335 *
RCE            -0.65651    0.09977   -6.580 4.70e-11 ***
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Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 622.92  on 789  degrees of freedom
Residual deviance: 571.23  on 786  degrees of freedom
AIC: 579.23

Number of Fisher Scoring iterations: 5
```