Classifying the Ideal Candidate for Congress

By: Carolann Moore

The Dataset

-Current and Past Legislators

-Demographics Information

    -Birthday, Gender, Party, etc

-Over 12k congress members

-Looked at Chinese Zodiac Animal

-Collected by GovTrack.com
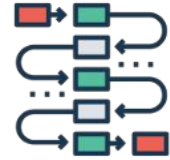
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The Method

The OSEMiN Approach

OBTAIN SCRUB EXPLORE MODEL INTERPRET

The Models

Logistic Regression---------Accuracy: 84.68%

Random Forest--------------Accuracy: 85.20%
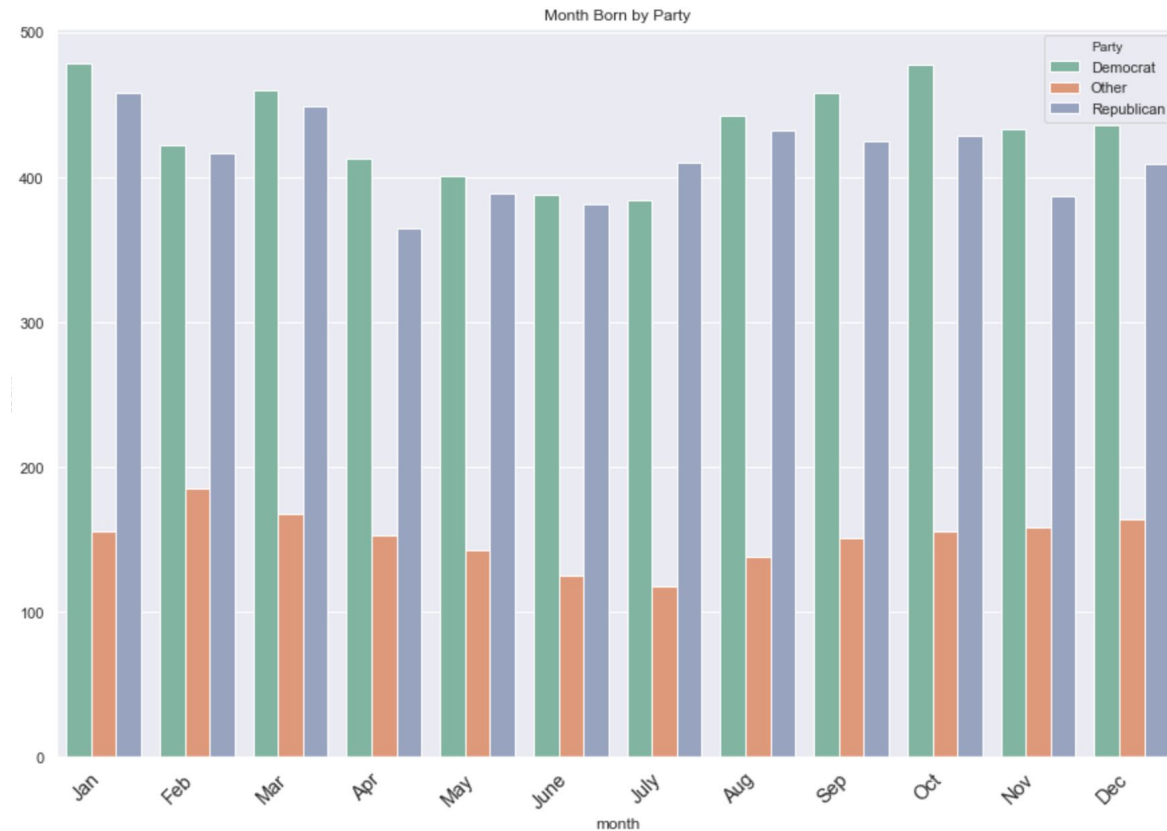
XGBoost----------------------Accuracy: 84.79%

K-Nearest Neighbor--------Accuracy: 82.75%
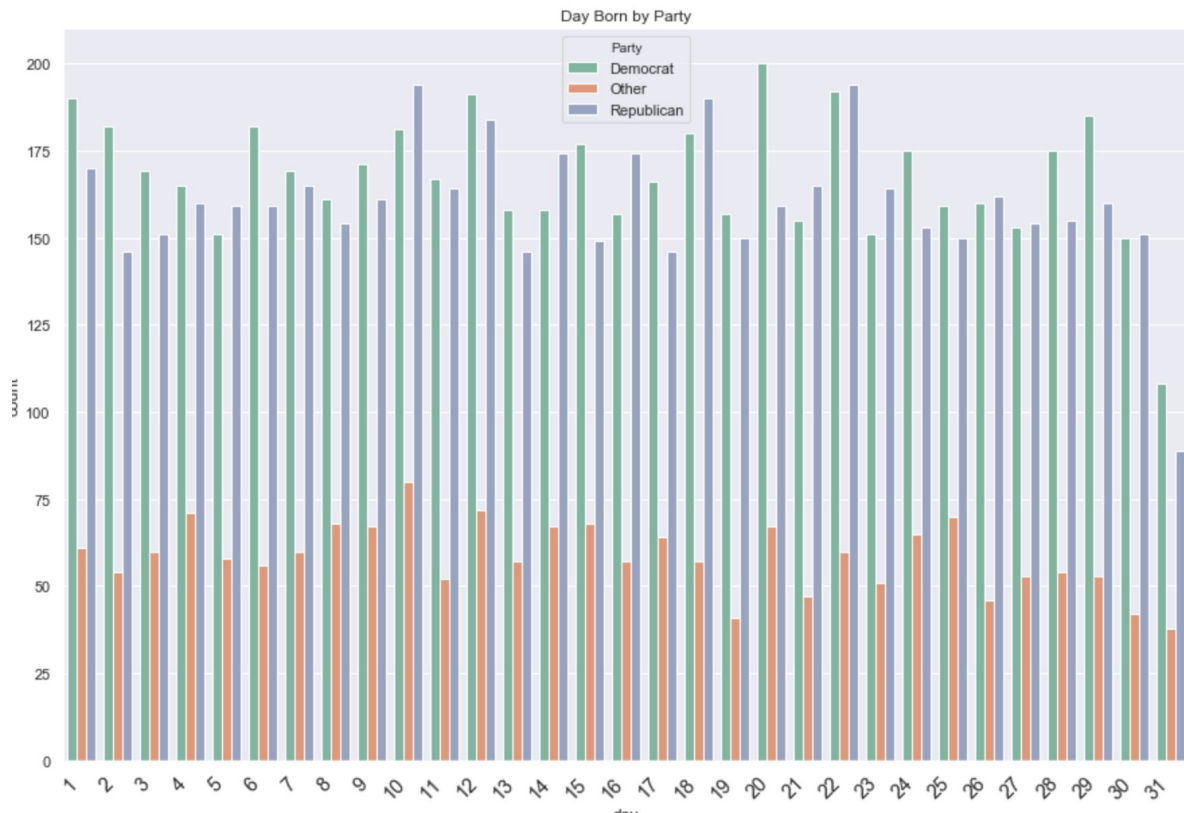
Class Imbalance issues solved using SMOTE

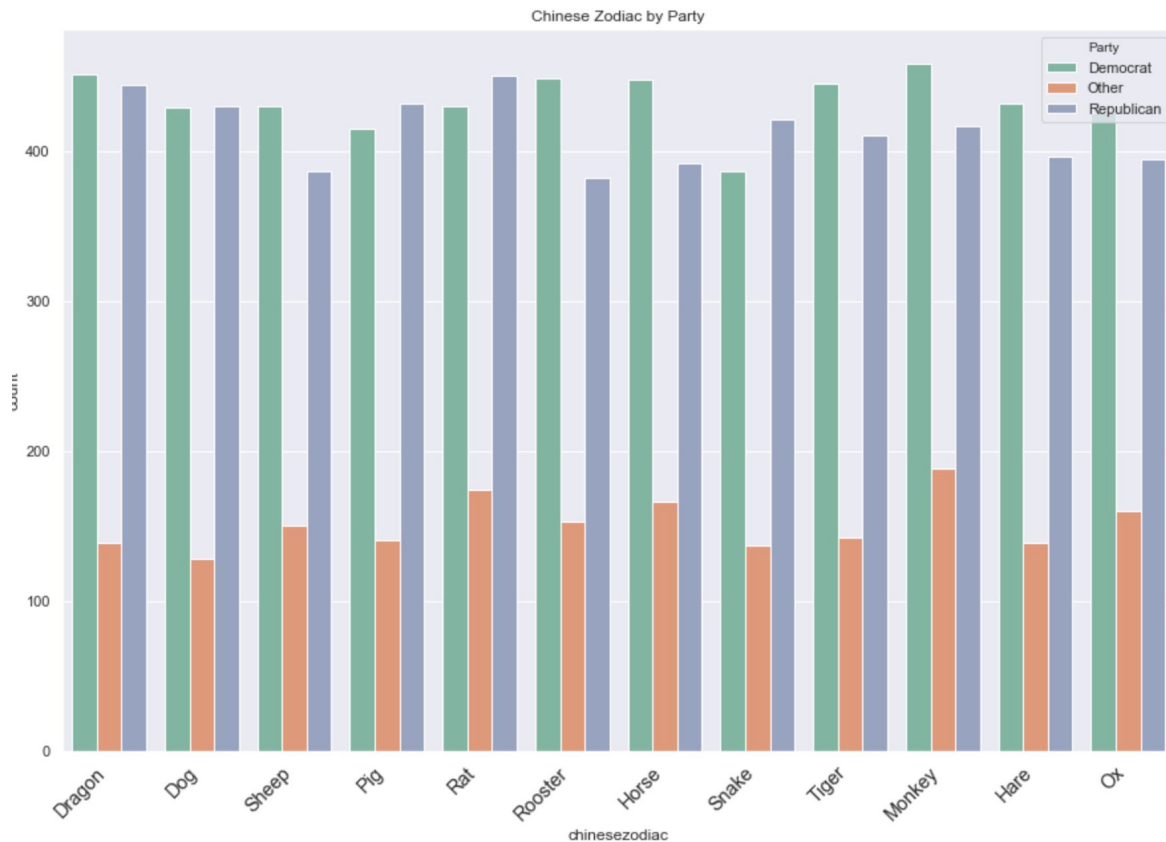Dimensionality issues solved using Principal Component Analysis

Month born by Party
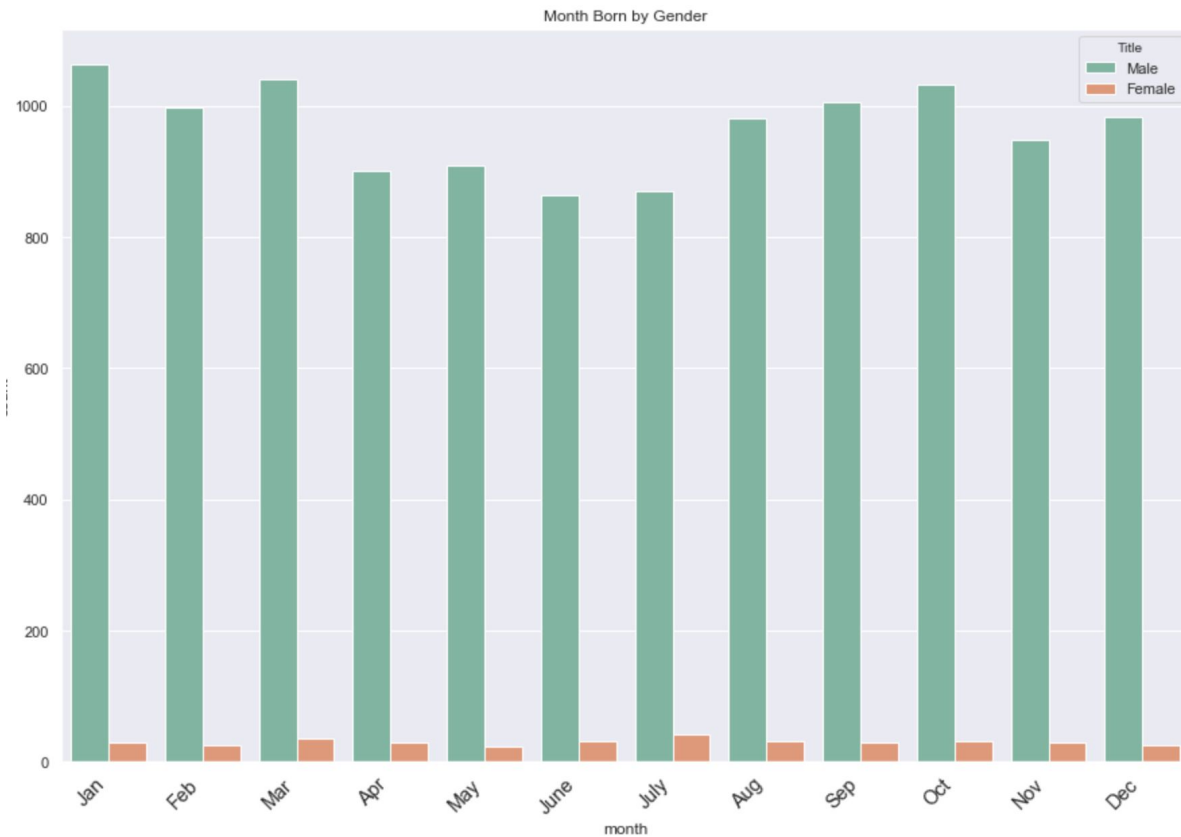
-Least amount of Republicans born in April
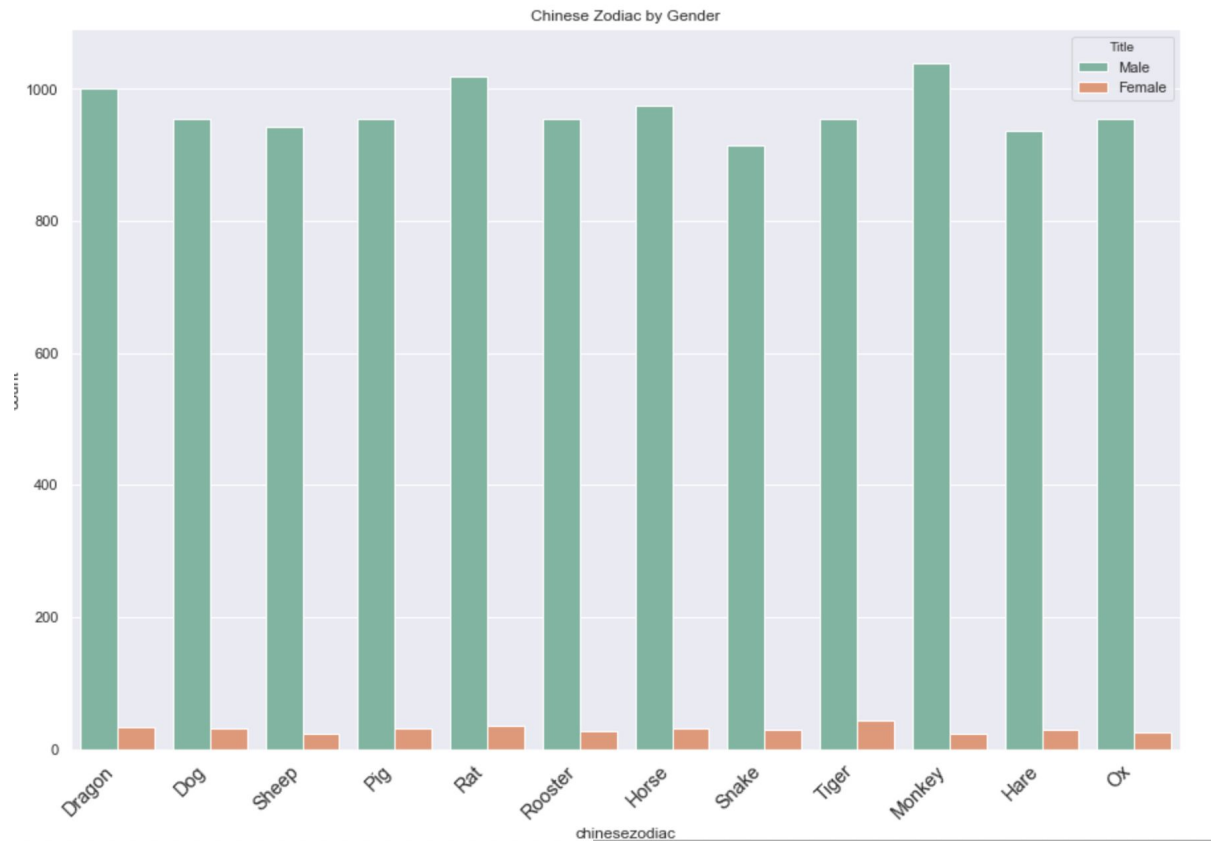
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Day Born by Party

Chinese Zodiac by Party

Chinese Zodiac by Party

Month Born
By Gender

Month Born by Gender

Chinese Zodiac By Gender
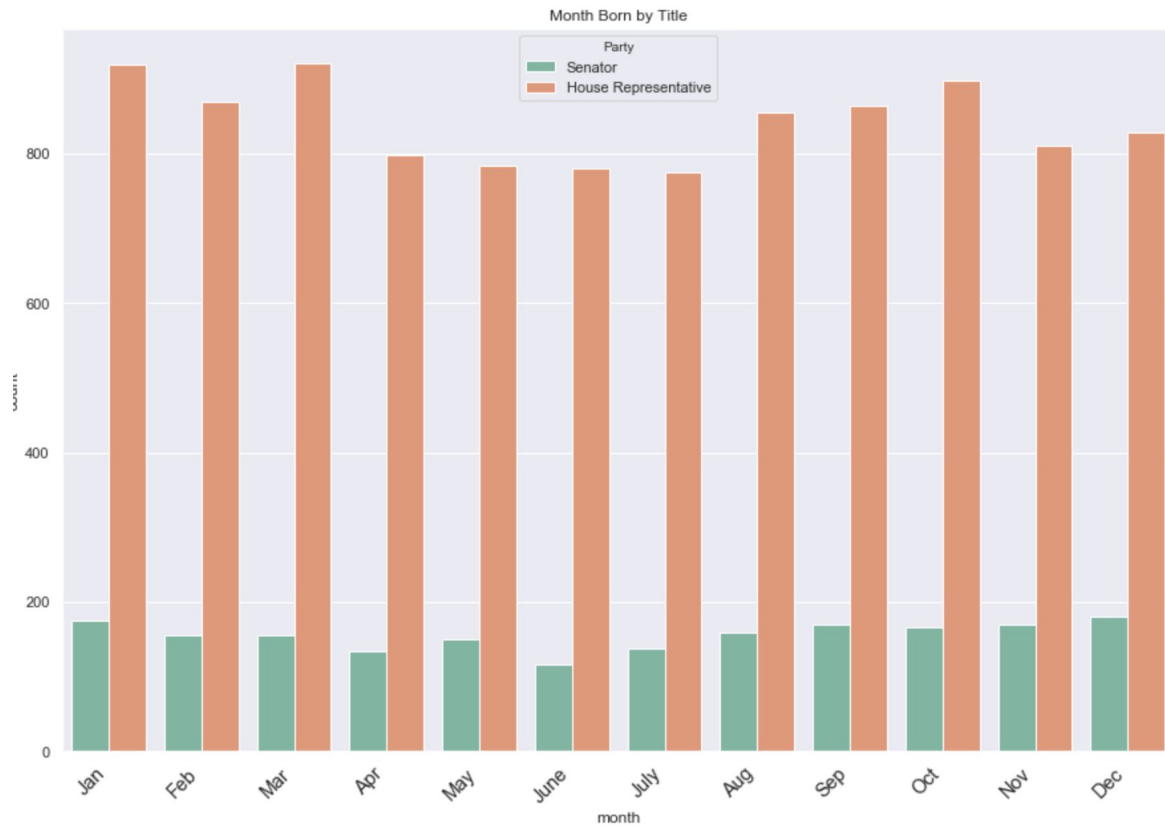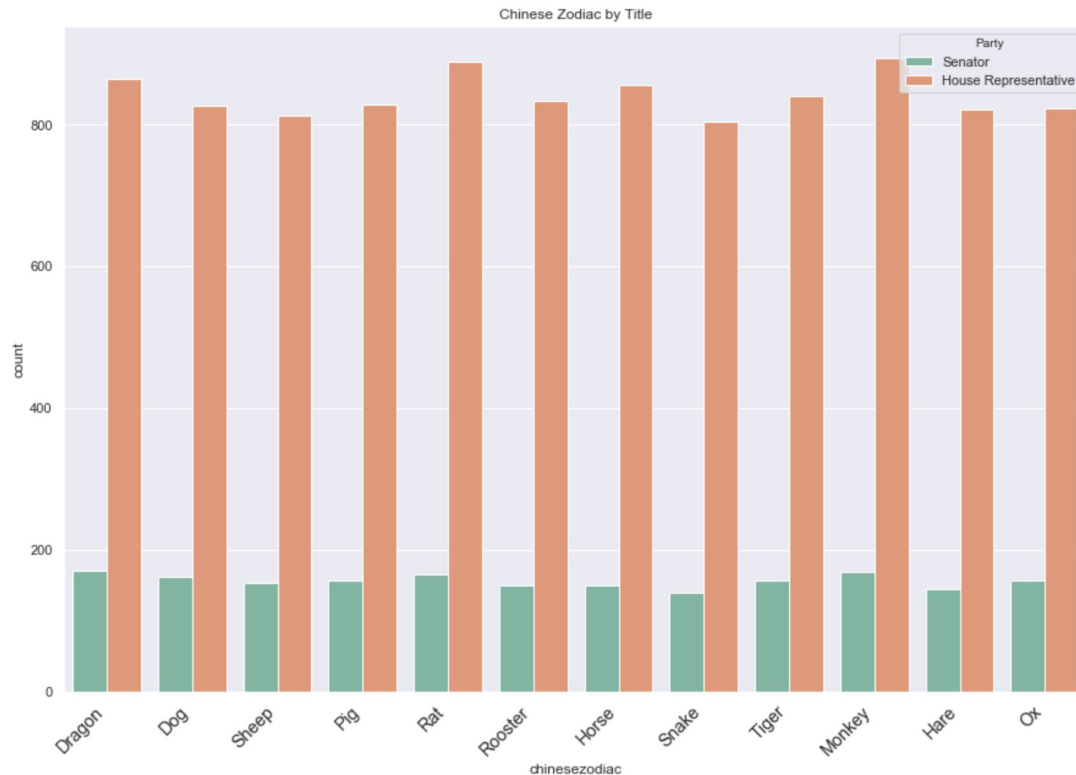

Chinese Zodiac by Gender

Month Born By Title

Month Born by Title

Chinese Zodiac
By Title

Chinese Zodiac by Title

What's so special about the Rat's, Monkey's, and Dragon's?

Rat	Monkey	Dragon
-Adaptable	-Enthusiastic	-Decisive
-Smart	-Self-Assured	-Inspiring
-Alert	-Sociable	-Ambitious
-Outgoing	-Innovative	-Magnanimous
-Flexibility		-Romantic

What's so bad about Summer?

Taurus

-Stubborn

-Uncompromising

-Possessive

Gemini

-Nervous

-Inconsistent

-Indecisive

Cancer

-Moody

-Pessimistic

-Suspicious

-Manipulative

-Insecure

Thank you!!