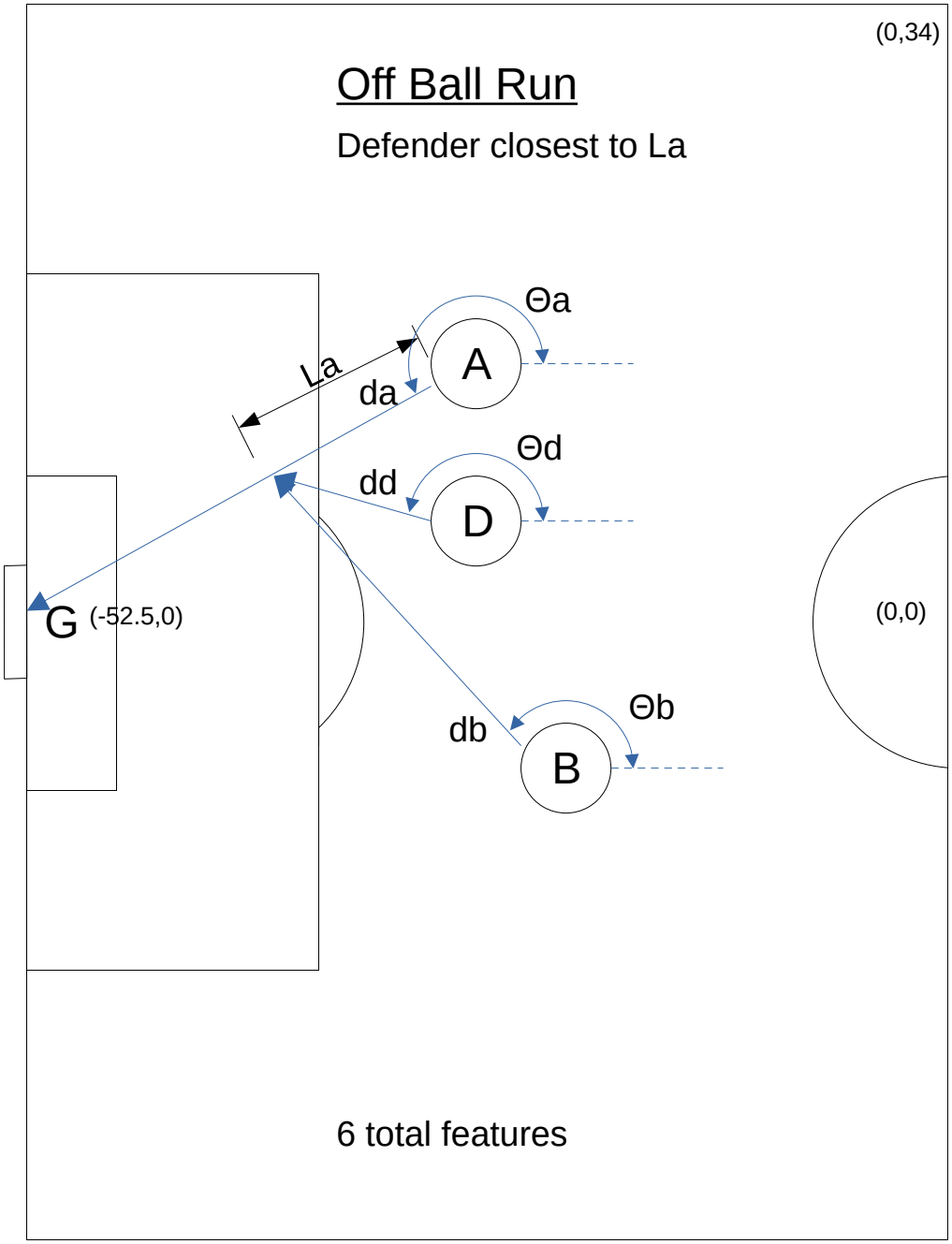
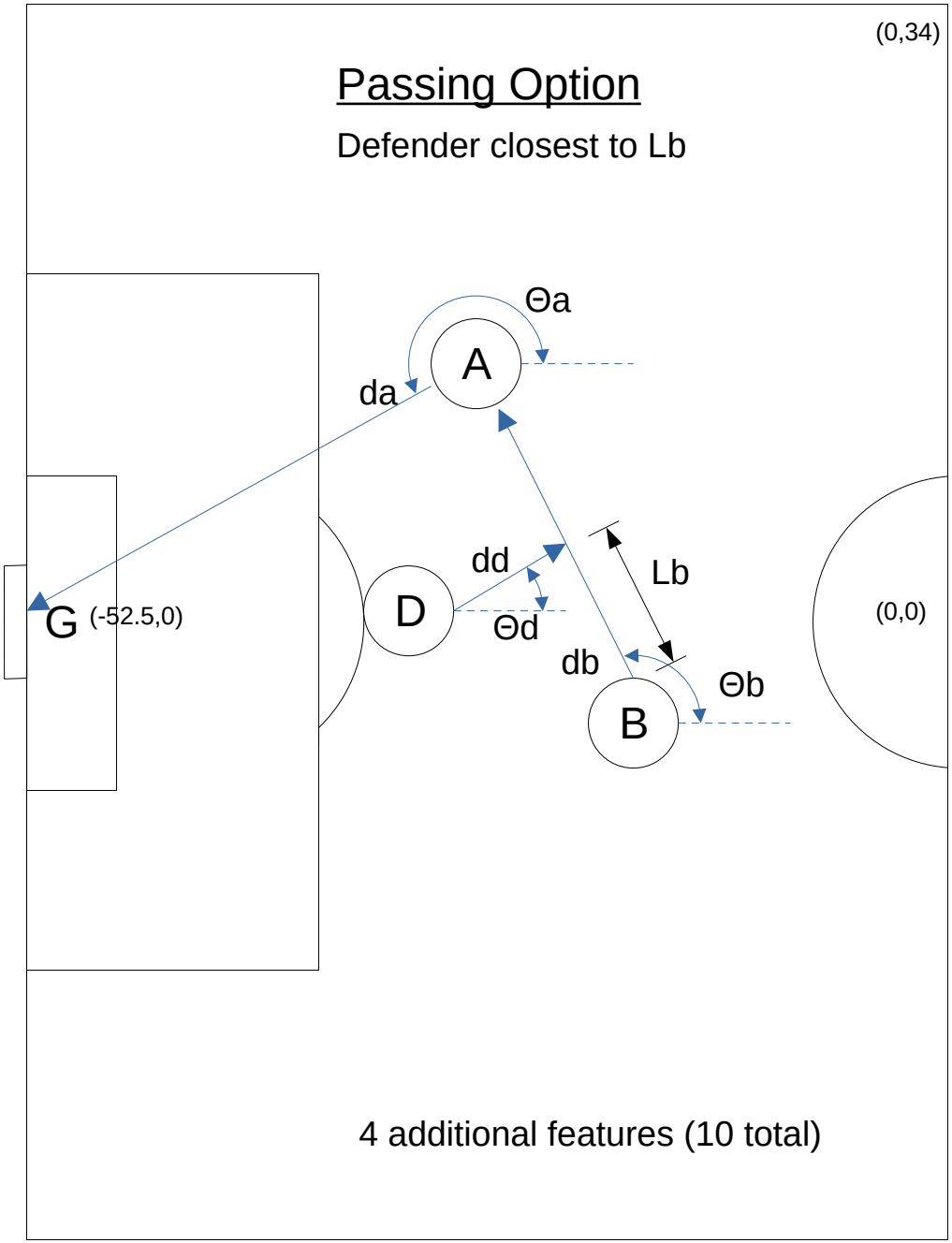
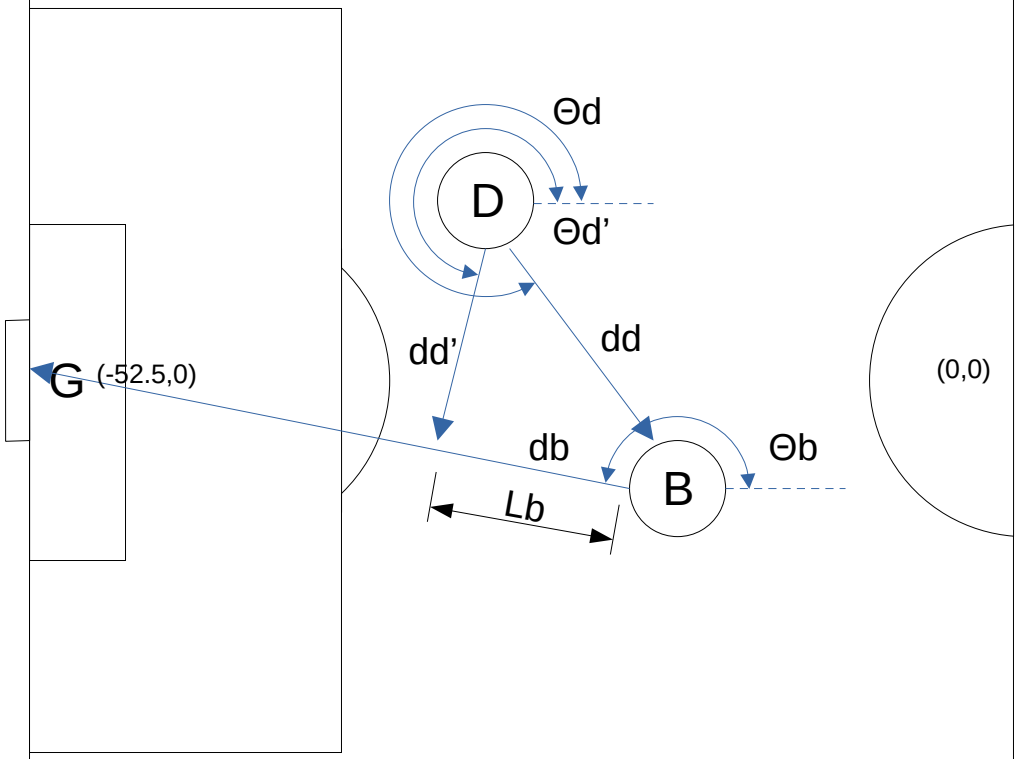

(0,34)
Off Ball Run
Defender closest to La
Θa
A
La
da
Θd
dd
D
G
(-52.5,0)
(0,0)
Θb
db
B
6 total features


(0,34)
Passing Option
Defender closest to Lb
Θa
A
da
dd
Lb
G
(-52.5,0)
D
Θd
(0,0)
db
Θb
B
4 additional features (10 total)

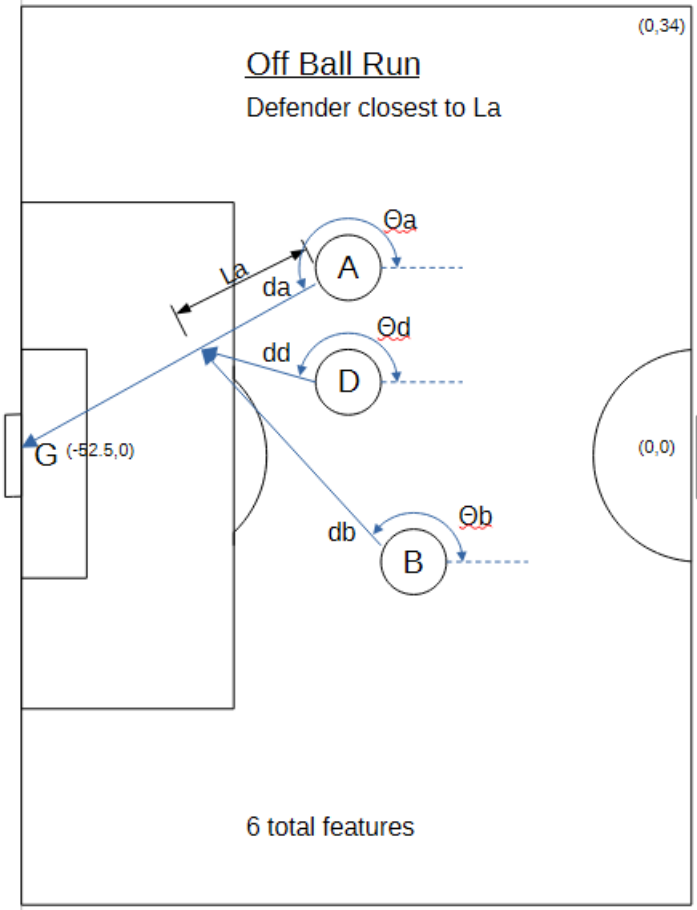
(0,34)

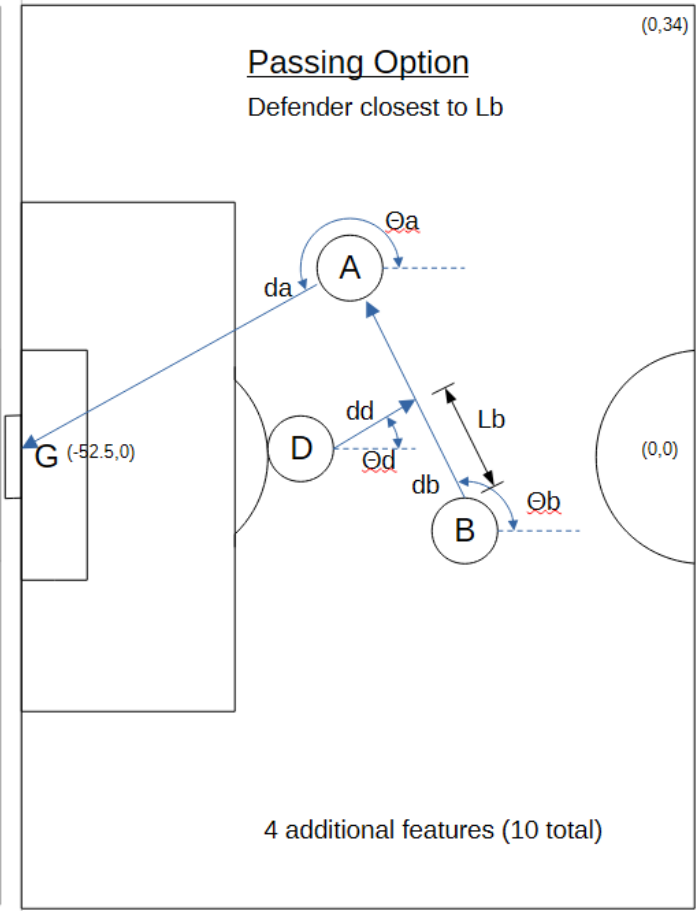
On Ball Engagement

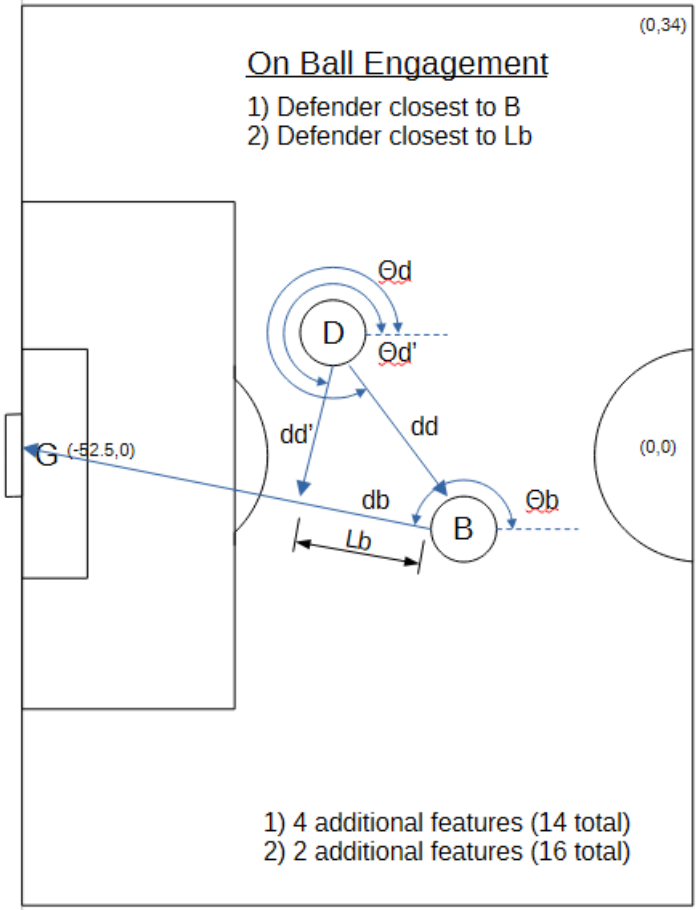
1) Defender closest to B
2) Defender closest to Lb

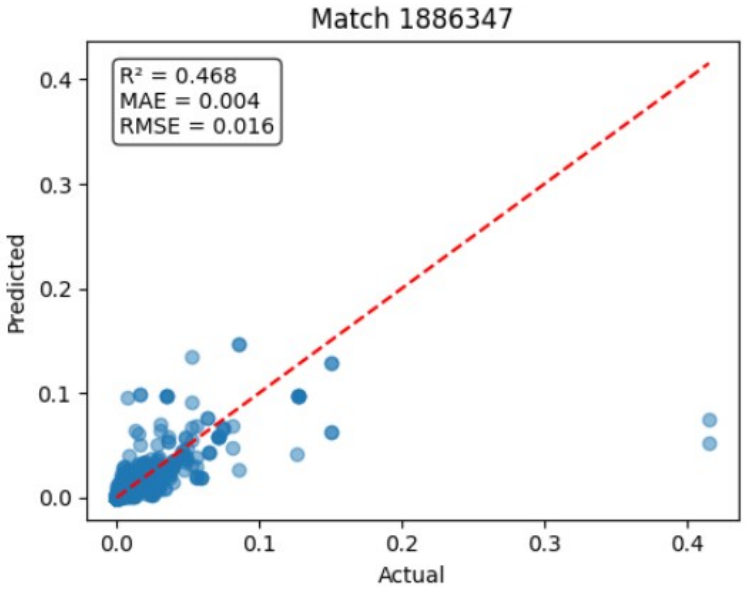


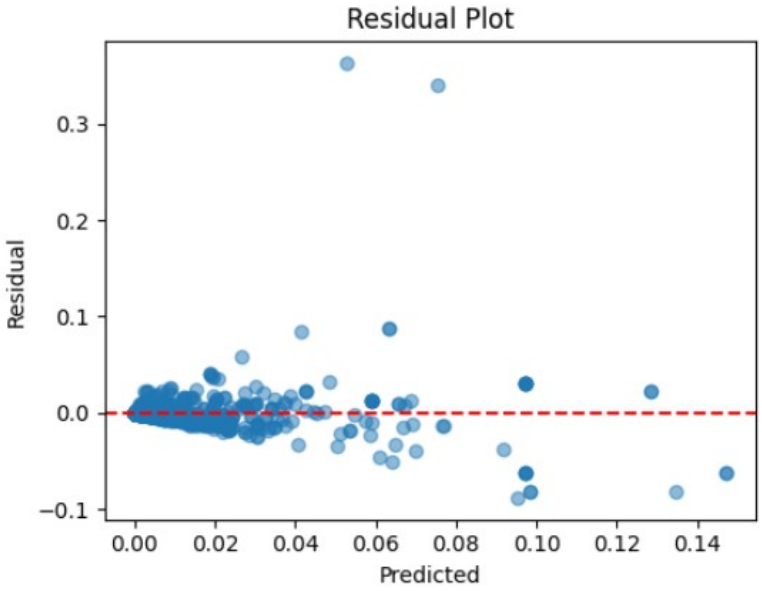
1) 4 additional features (14 total)
2) 2 additional features (16 total)

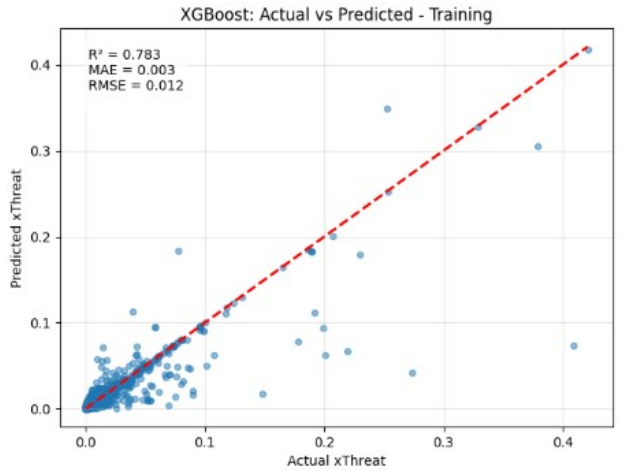

(0,34)
Off Ball Run
Defender closest to La
Θa
A
La
da
Θd
dd
D
G (-52.5,0)
(0,0)
db
Θb
B
6 total features

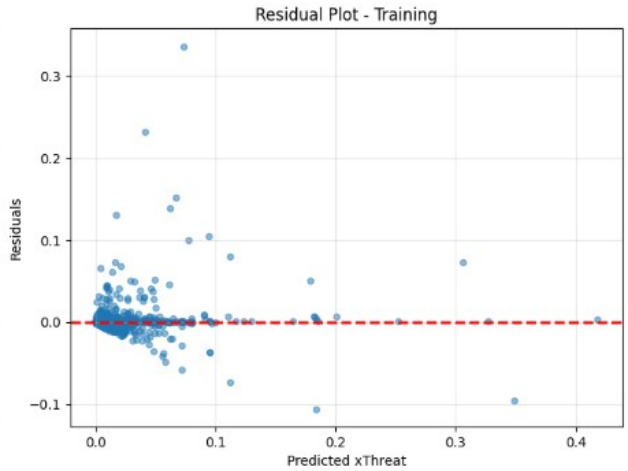

(0,34)
Passing Option
Defender closest to Lb
Θa
A
da
D
dd
Θd
Lb
db
Θb
B
G (-52.5,0)
(0,0)
4 additional features (10 total)

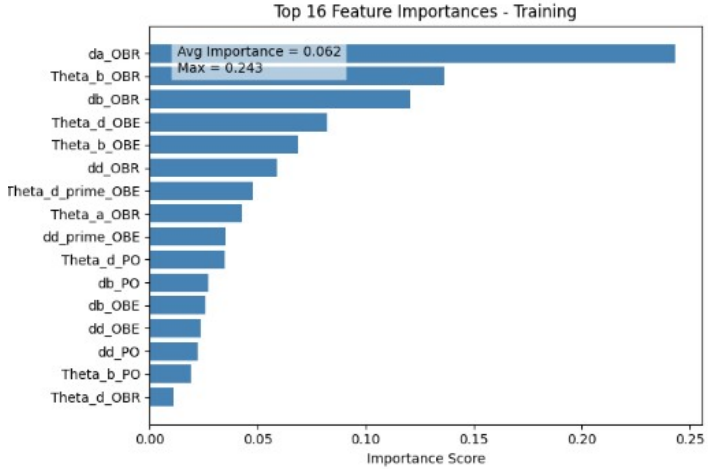

(0,34)
On Ball Engagement
1) Defender closest to B
2) Defender closest to Lb
Θd
D
Θd'
dd'
dd
db
Θb
B
Lb
G (-52.5,0)
(0,0)
1) 4 additional features (14 total)
2) 2 additional features (16 total)

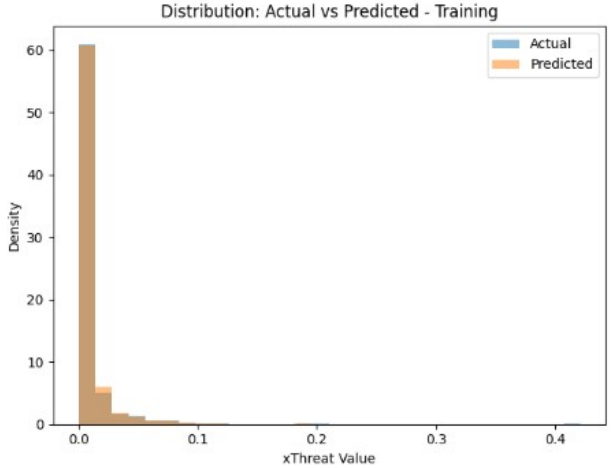

Match 1886347
R² = 0.468
MAE = 0.004
RMSE = 0.016
Predicted
Actual

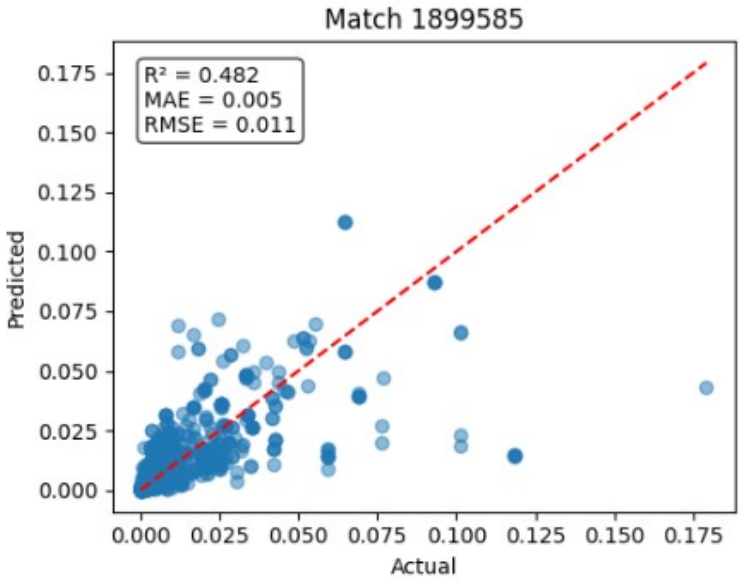

Residual Plot
Residual
Predicted

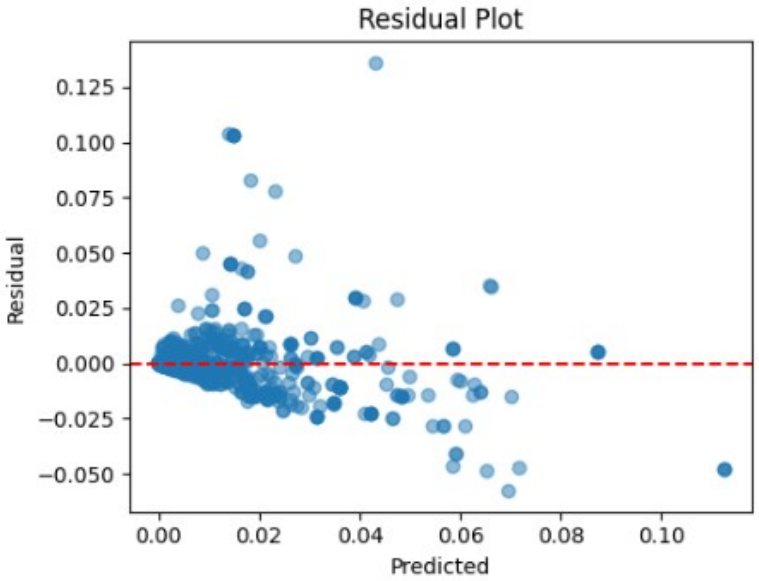

XGBoost: Actual vs Predicted - Training
R² = 0.783
MAE = 0.003
RMSE = 0.012
Predicted xThreat
Actual xThreat

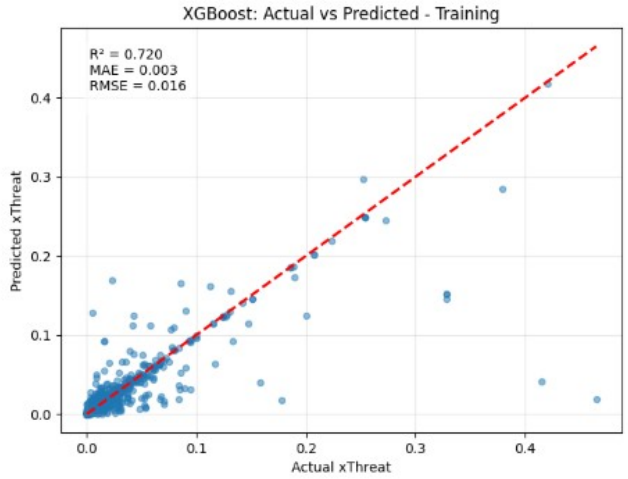

Residual Plot - Training
Residuals
Predicted xThreat

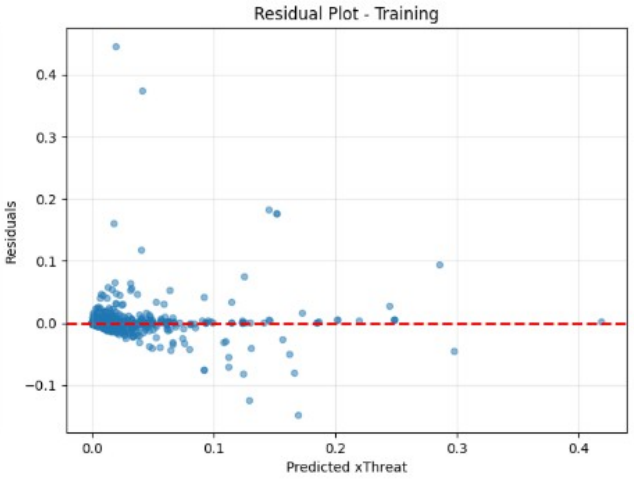

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.243
da_OBR
Theta_b_OBR
db_OBR
Theta_d_OBE
Theta_b_OBE
dd_OBR
Theta_d_prime_OBE
Theta_a_OBR
dd_prime_OBE
Theta_d_PO
db_PO
db_OBE
dd_OBE
dd_PO
Theta_b_PO
Theta_d_OBR
Importance Score

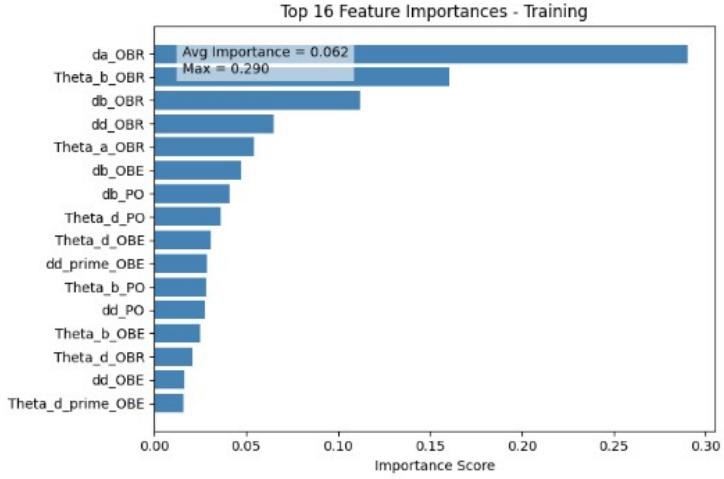

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

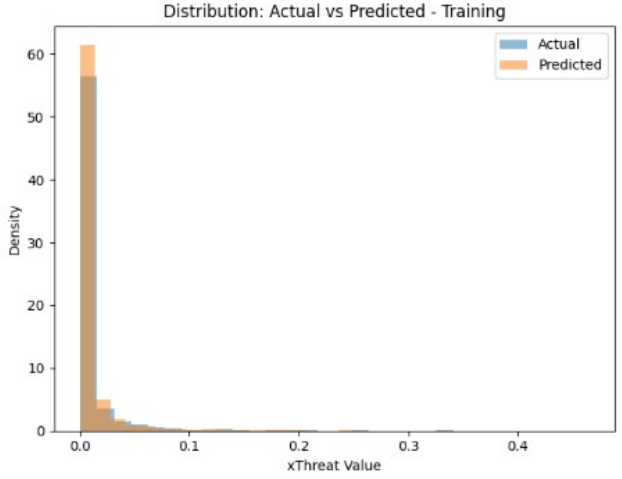

Match 1899585
R² = 0.482
MAE = 0.005
RMSE = 0.011
Predicted
Actual

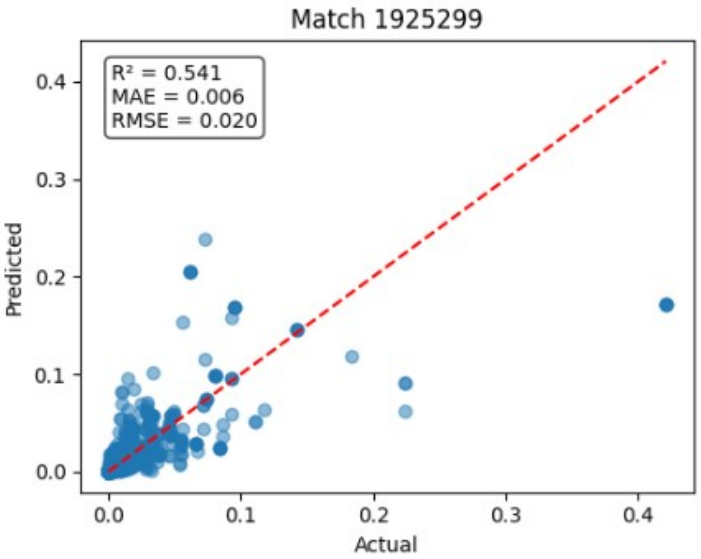

Residual Plot
Residual
Predicted

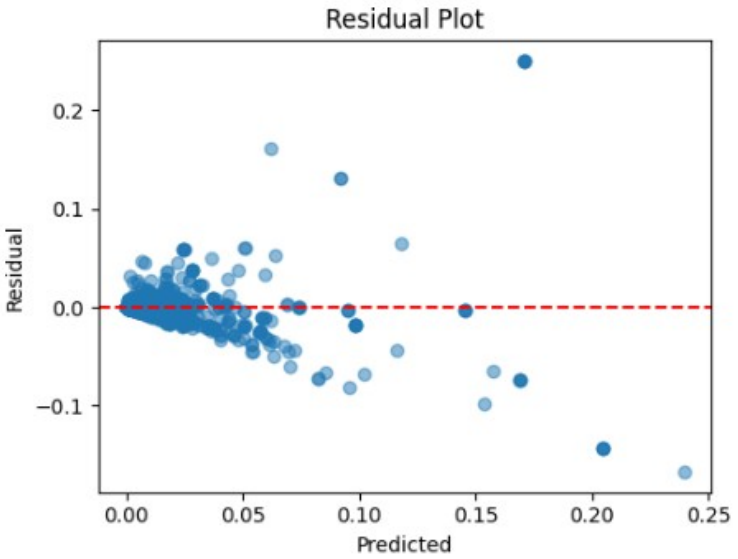

XGBoost: Actual vs Predicted - Training
R² = 0.720
MAE = 0.003
RMSE = 0.016
Predicted xThreat
Actual xThreat

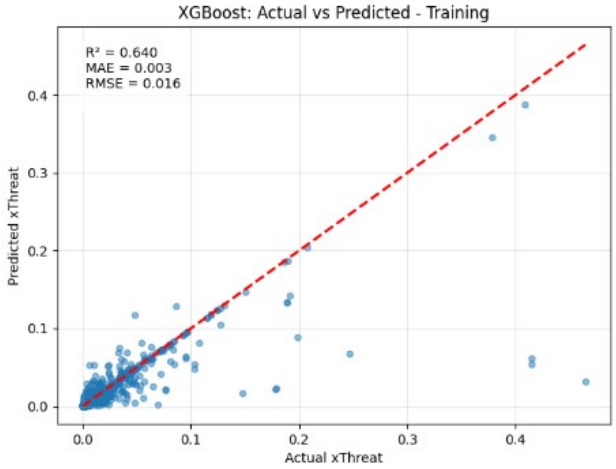

Residual Plot - Training
Residuals
Predicted xThreat

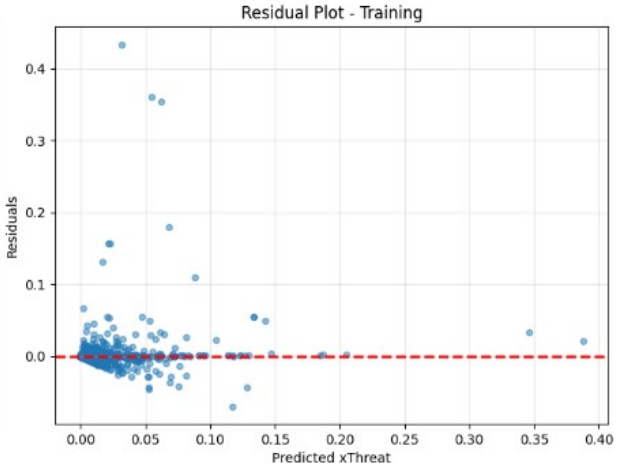

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.290
da_OBR
Theta_b_OBR
db_OBR
dd_OBR
Theta_a_OBR
db_OBE
db_PO
Theta_d_PO
Theta_d_OBE
dd_prime_OBE
Theta_b_PO
dd_PO
Theta_b_OBE
Theta_d_OBR
dd_OBE
Theta_d_prime_OBE
Importance Score

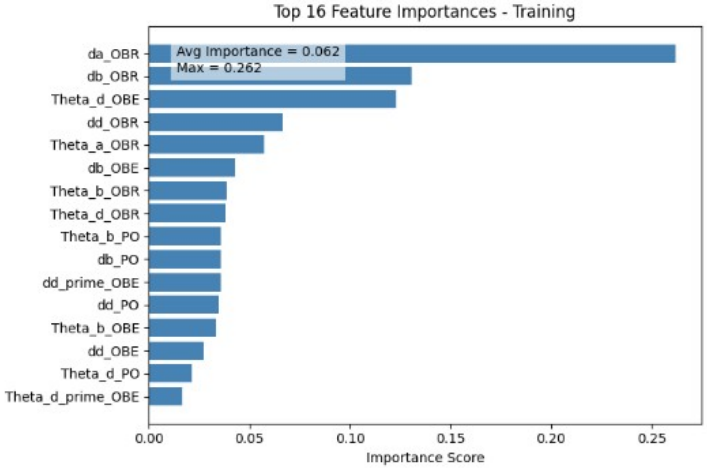

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

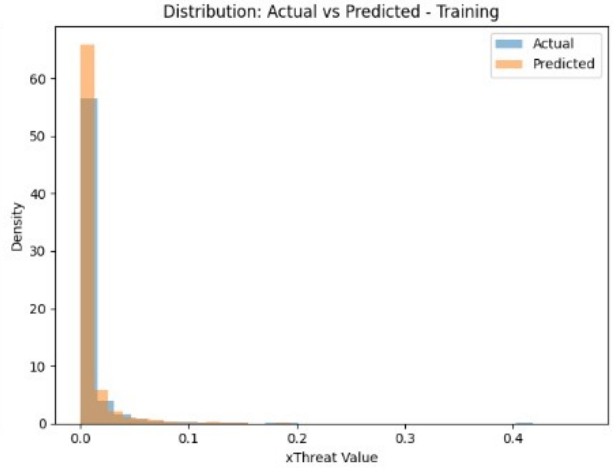

Match 1925299
R² = 0.541
MAE = 0.006
RMSE = 0.020
Predicted
Actual

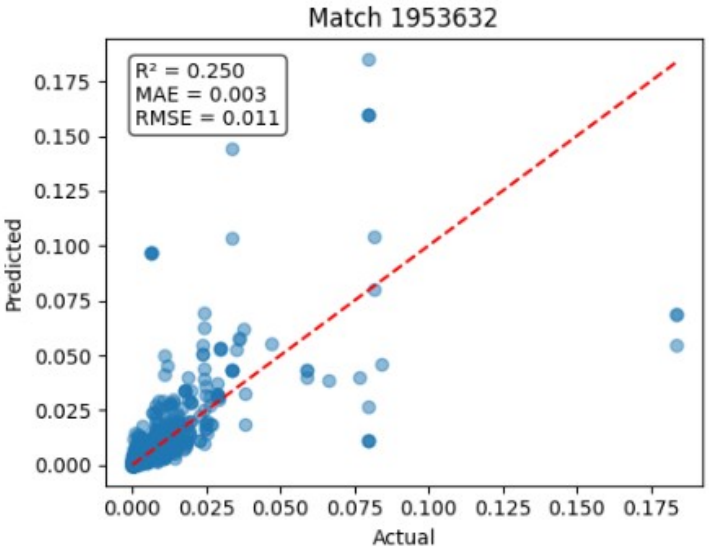

Residual Plot
Residual
Predicted

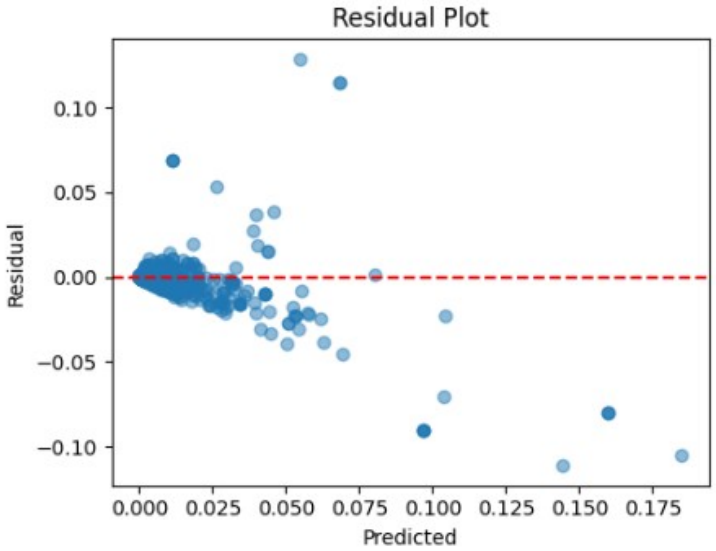

XGBoost: Actual vs Predicted - Training
R² = 0.640
MAE = 0.003
RMSE = 0.016
Predicted xThreat
Actual xThreat

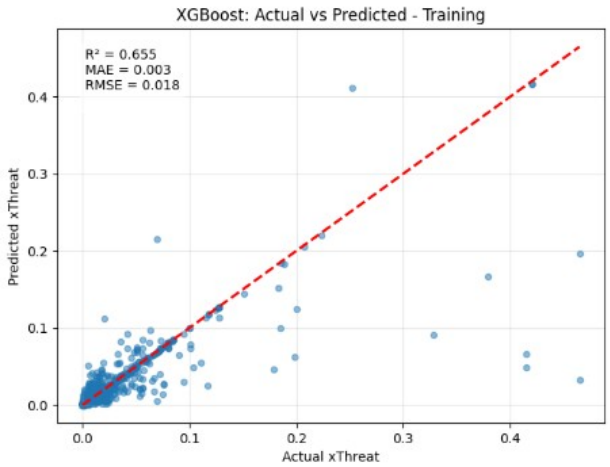

Residual Plot - Training
Residuals
Predicted xThreat

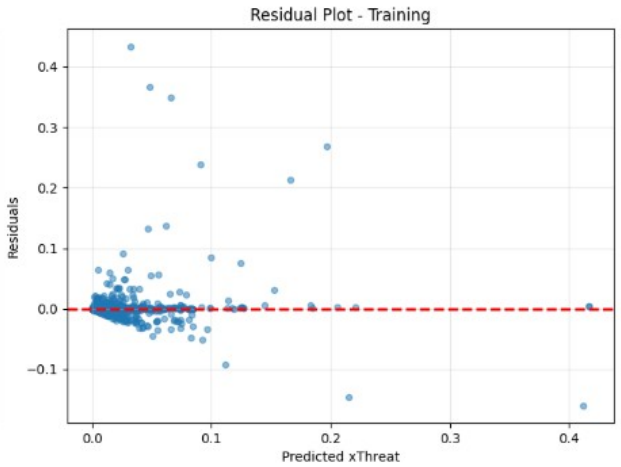

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.262
da_OBR
db_OBR
Theta_d_OBE
dd_OBR
Theta_a_OBR
db_OBE
Theta_b_OBR
Theta_d_OBR
Theta_b_PO
db_PO
dd_prime_OBE
dd_PO
Theta_b_OBE
dd_OBE
Theta_d_PO
Theta_d_prime_OBE
Importance Score

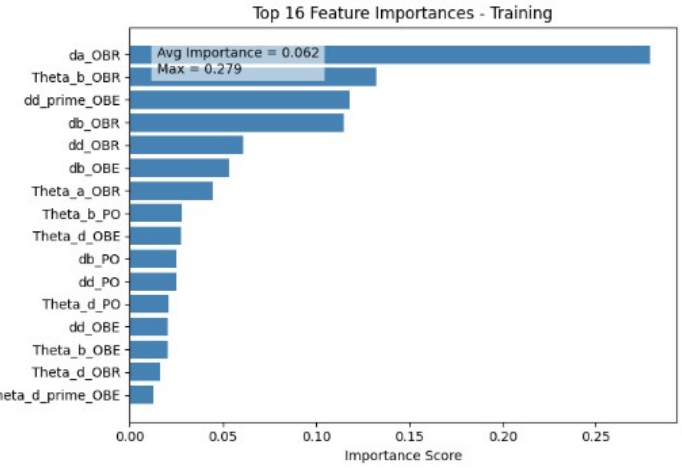

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

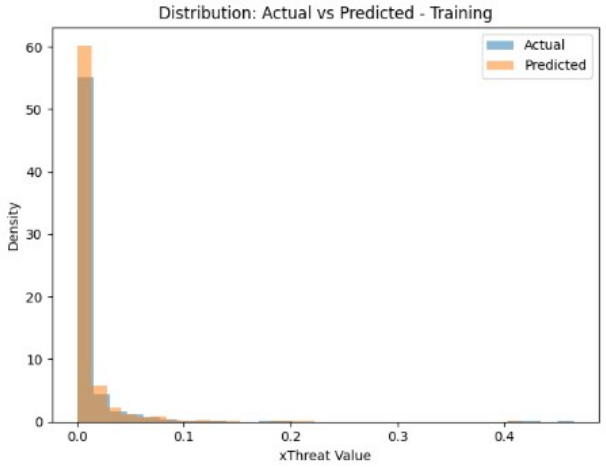

Match 1953632
R² = 0.250
MAE = 0.003
RMSE = 0.011
Predicted
Actual

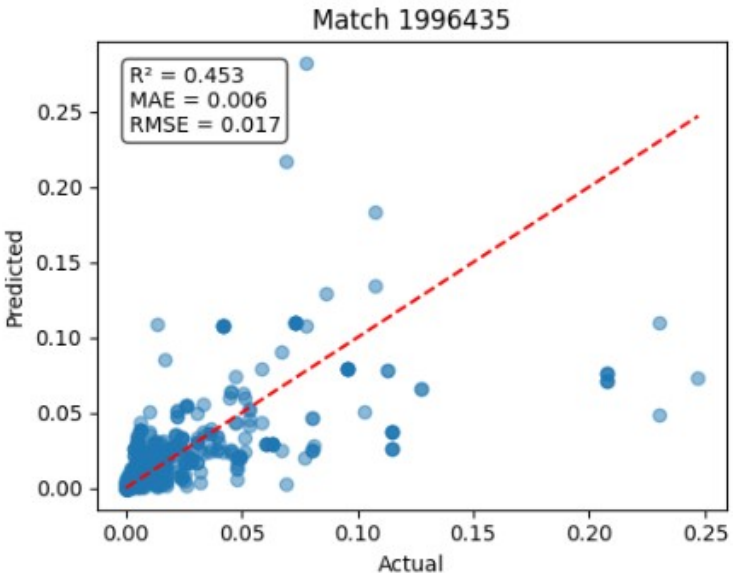

Residual Plot
Residual
Predicted

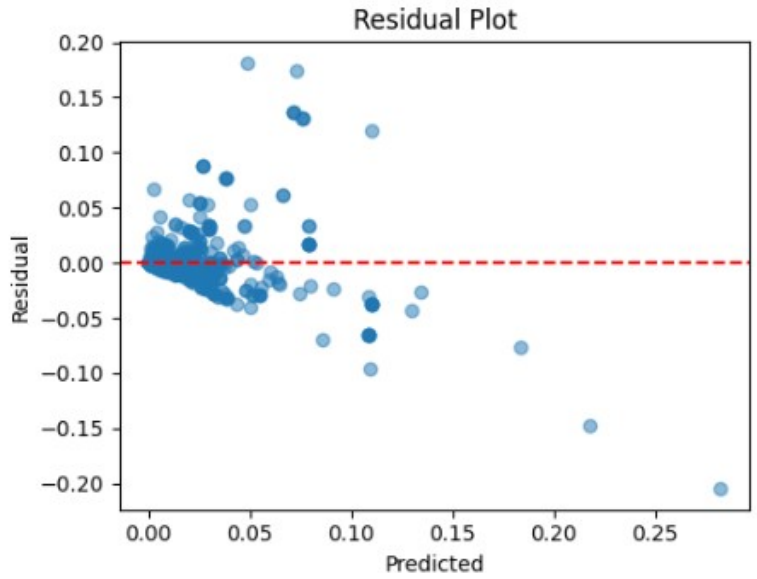

XGBoost: Actual vs Predicted - Training
R² = 0.655
MAE = 0.003
RMSE = 0.018
Predicted xThreat
Actual xThreat

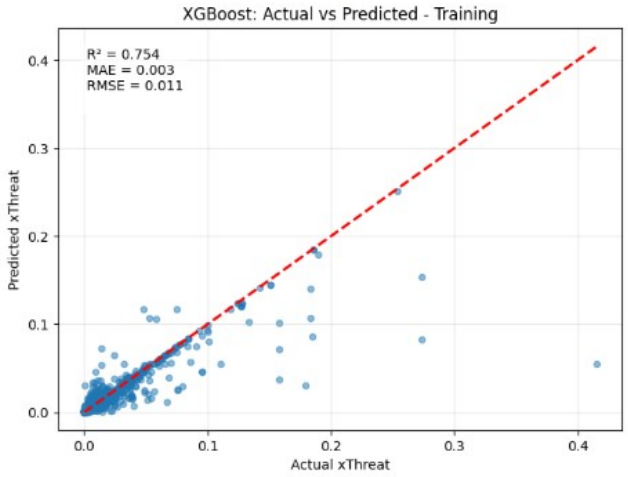

Residual Plot - Training
Residuals
Predicted xThreat

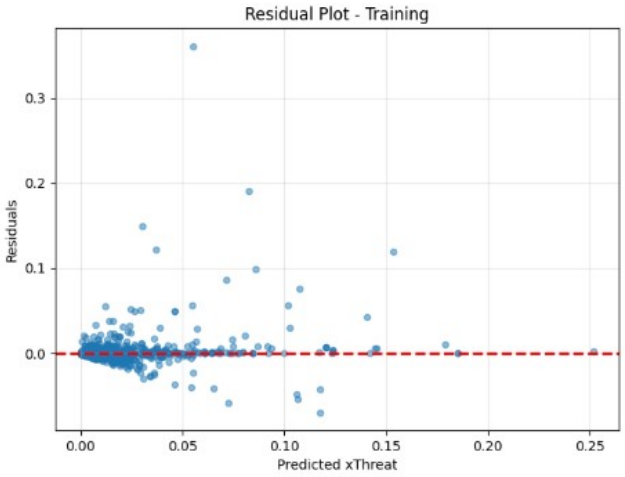

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.279
da_OBR
Theta_b_OBR
dd_prime_OBE
db_OBR
dd_OBR
db_OBE
Theta_a_OBR
Theta_b_PO
Theta_d_OBE
db_PO
dd_PO
Theta_d_PO
dd_OBE
Theta_b_OBE
Theta_d_OBR
Theta_d_prime_OBE
Importance Score

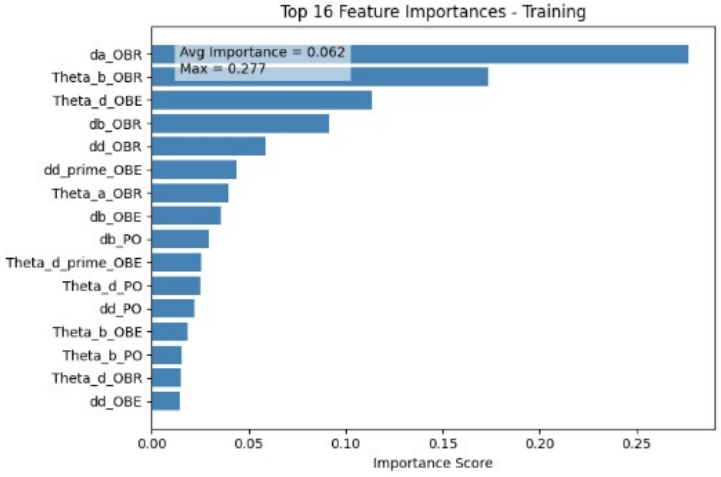

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

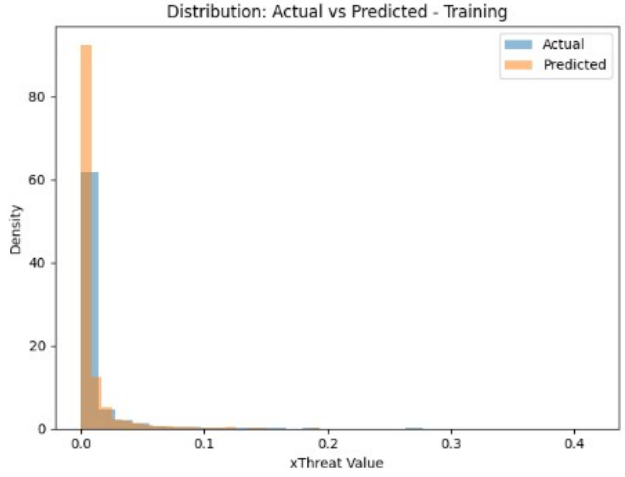

Match 1996435
R² = 0.453
MAE = 0.006
RMSE = 0.017
Predicted
Actual

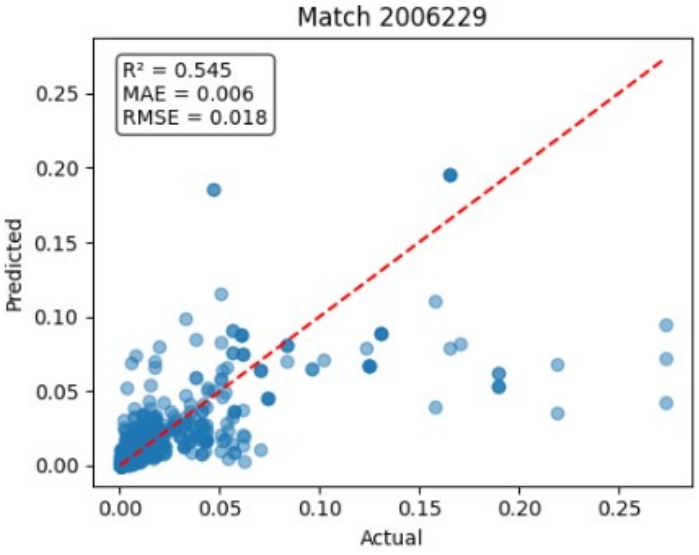

Residual Plot
Residual
Predicted

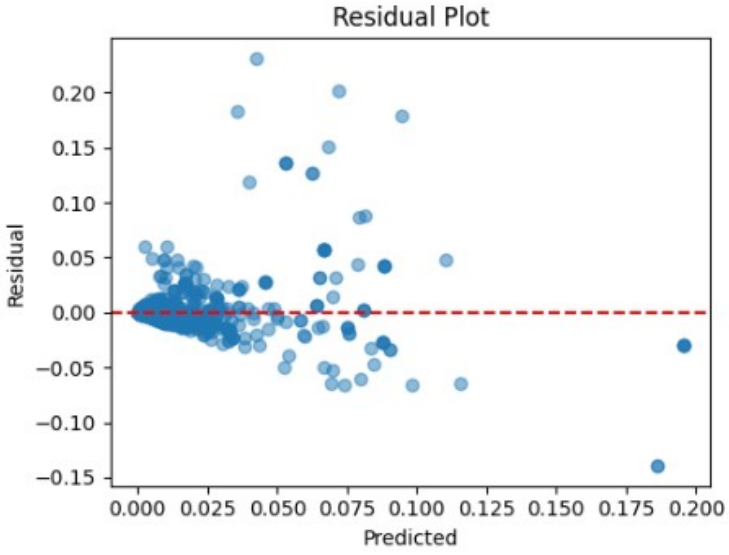

XGBoost: Actual vs Predicted - Training
R² = 0.754
MAE = 0.003
RMSE = 0.011
Predicted xThreat
Actual xThreat

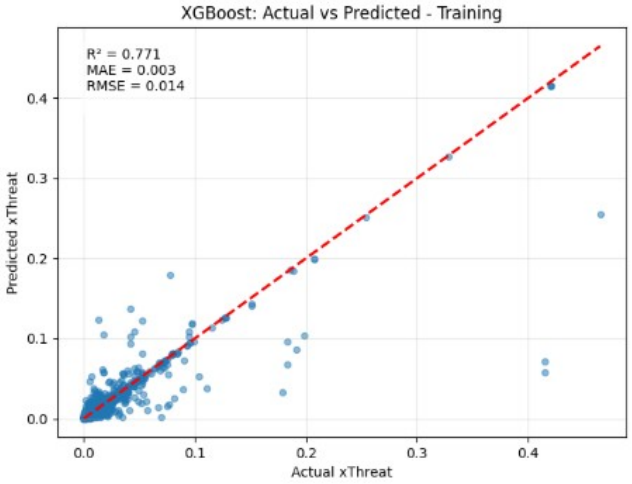

Residual Plot - Training
Residuals
Predicted xThreat

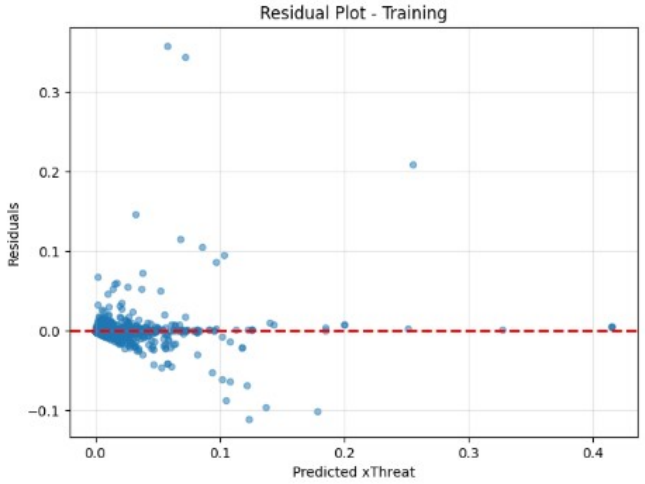

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.277
da_OBR
Theta_b_OBR
Theta_d_OBE
db_OBR
dd_OBR
dd_prime_OBE
Theta_a_OBR
db_OBE
db_PO
Theta_d_prime_OBE
Theta_d_PO
dd_PO
Theta_b_OBE
Theta_b_PO
Theta_d_OBR
dd_OBE
Importance Score

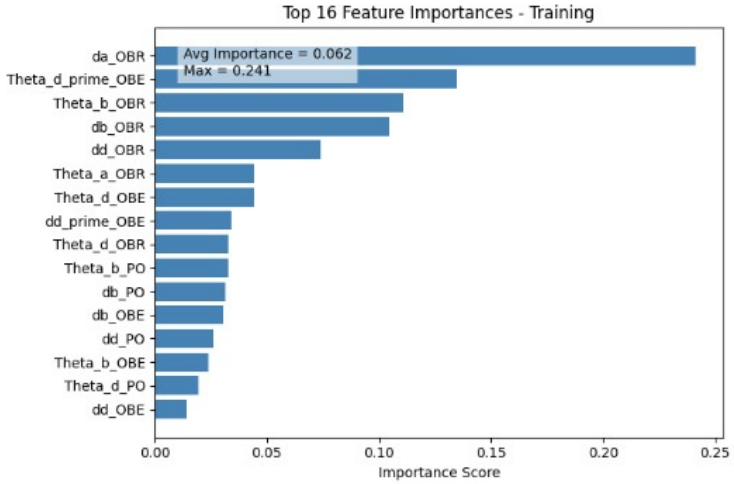

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

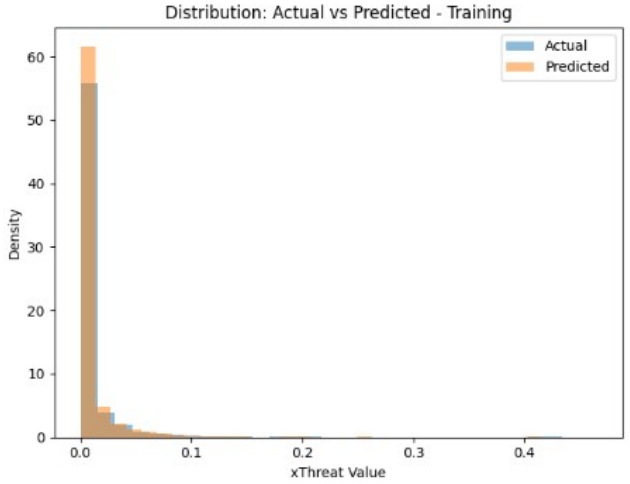

Match 2006229
R² = 0.545
MAE = 0.006
RMSE = 0.018
Predicted
Actual

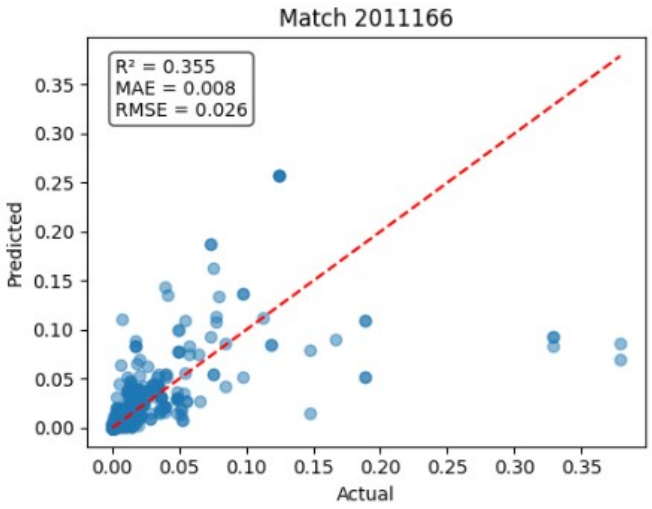

Residual Plot
Residual
Predicted

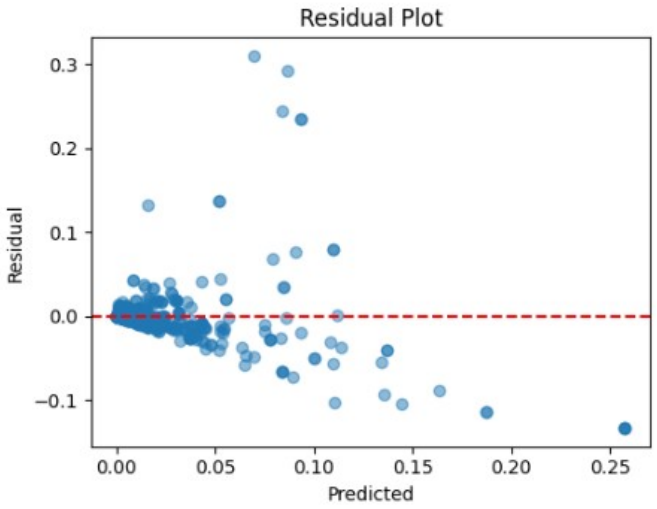

XGBoost: Actual vs Predicted - Training
R² = 0.771
MAE = 0.003
RMSE = 0.014
Predicted xThreat
Actual xThreat

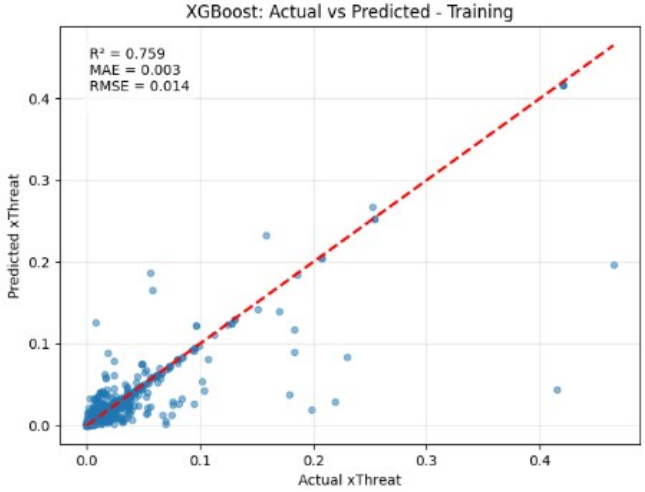

Residual Plot - Training
Residuals
Predicted xThreat

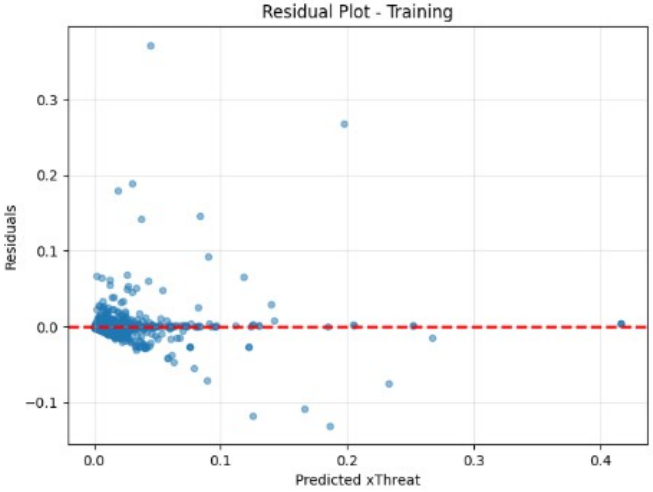

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.241
da_OBR
Theta_d_prime_OBE
Theta_b_OBR
db_OBR
dd_OBR
Theta_a_OBR
Theta_d_OBE
dd_prime_OBE
Theta_d_OBR
Theta_b_PO
db_PO
db_OBE
dd_PO
Theta_b_OBE
Theta_d_PO
dd_OBE
Importance Score

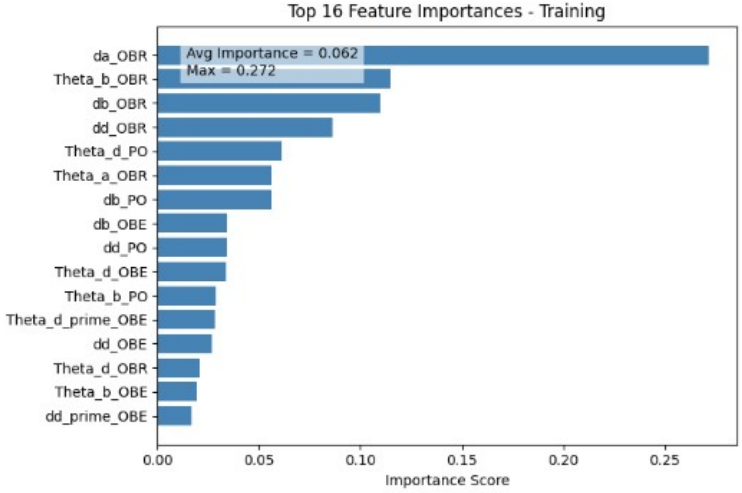

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

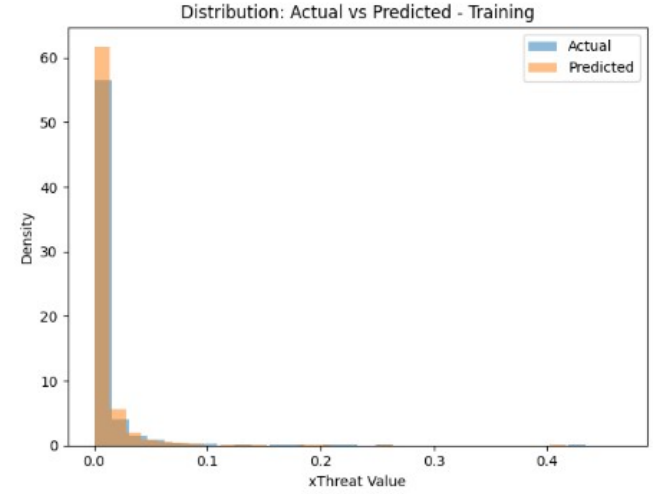

Match 2011166
R² = 0.355
MAE = 0.008
RMSE = 0.026
Predicted
Actual

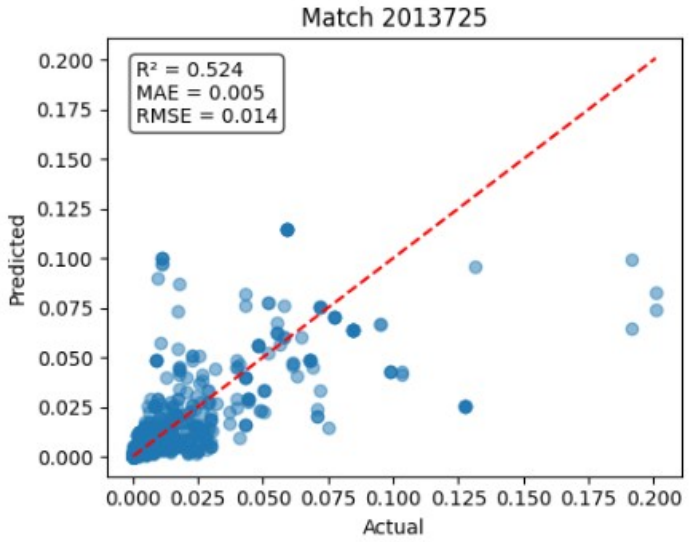

Residual Plot
Residual
Predicted

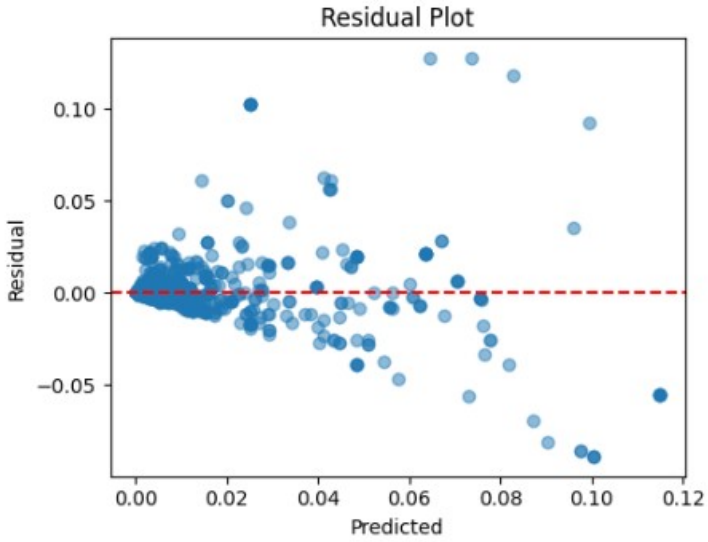

XGBoost: Actual vs Predicted - Training
R² = 0.759
MAE = 0.003
RMSE = 0.014
Predicted xThreat
Actual xThreat

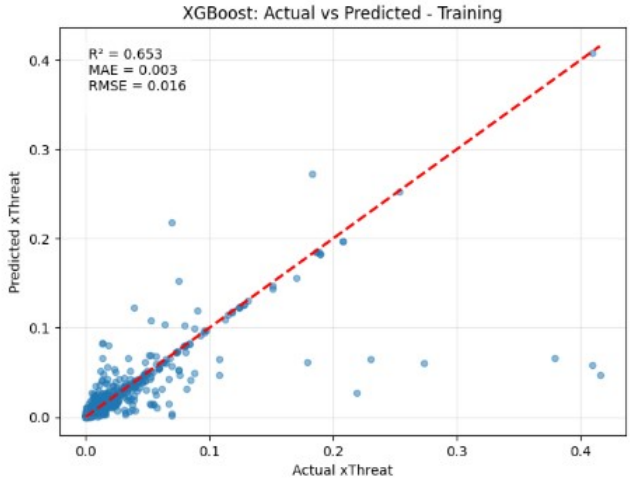

Residual Plot - Training
Residuals
Predicted xThreat

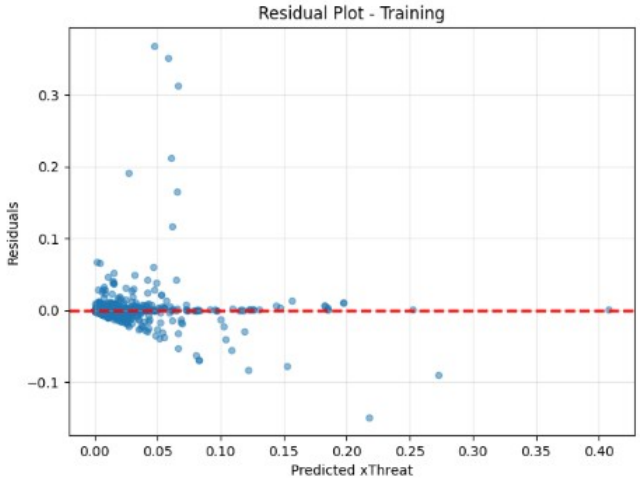

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.272
da_OBR
Theta_b_OBR
db_OBR
dd_OBR
Theta_d_PO
Theta_a_OBR
db_PO
db_OBE
dd_PO
Theta_d_OBE
Theta_b_PO
Theta_d_prime_OBE
dd_OBE
Theta_d_OBR
Theta_b_OBE
dd_prime_OBE
Importance Score

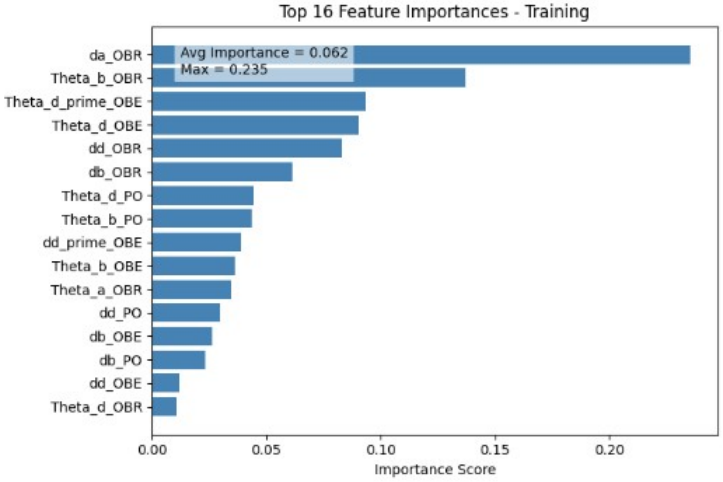

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

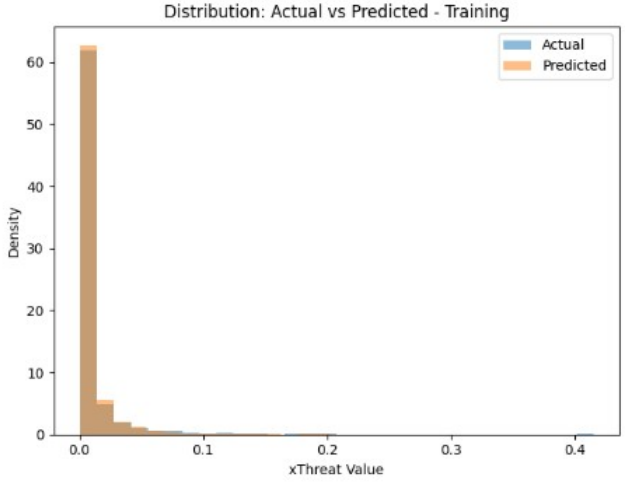

Match 2013725
R² = 0.524
MAE = 0.005
RMSE = 0.014
Predicted
Actual

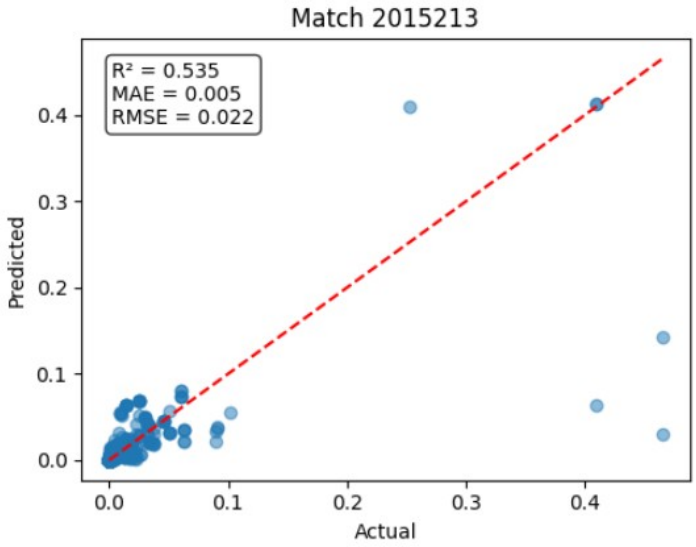

Residual Plot
Residual
Predicted

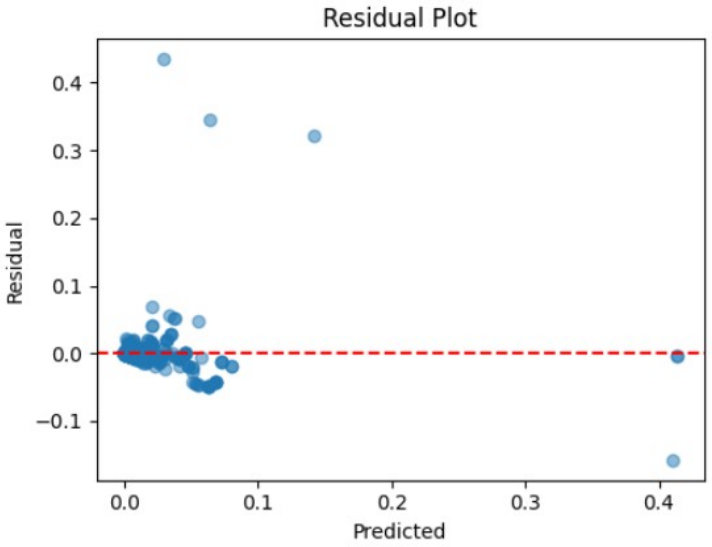

XGBoost: Actual vs Predicted - Training
R² = 0.653
MAE = 0.003
RMSE = 0.016
Predicted xThreat
Actual xThreat

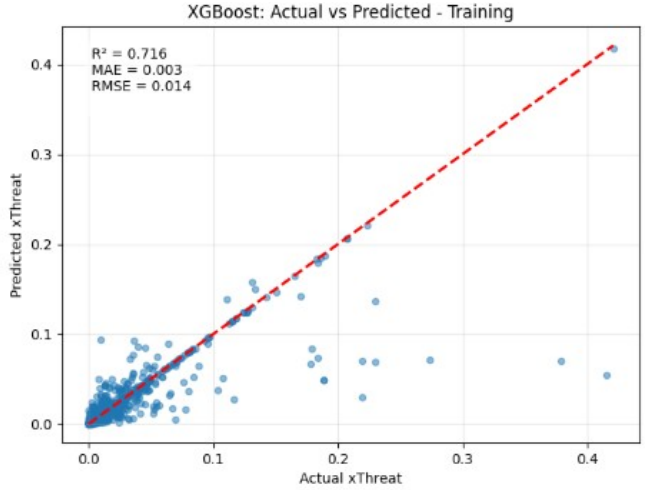

Residual Plot - Training
Residuals
Predicted xThreat

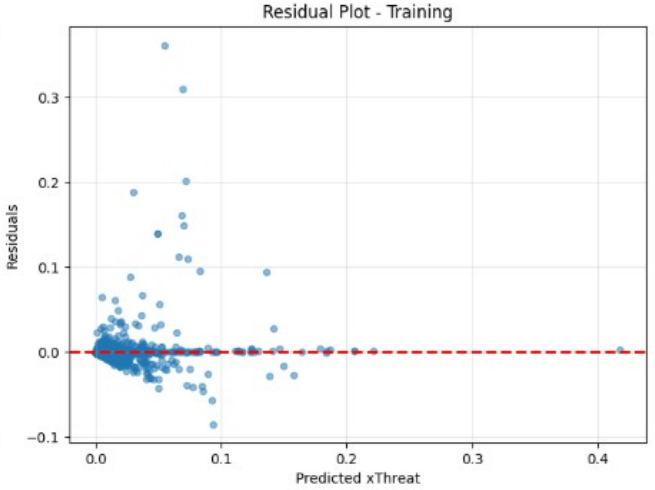

Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.235
da_OBR
Theta_b_OBR
Theta_d_prime_OBE
Theta_d_OBE
dd_OBR
db_OBR
Theta_d_PO
Theta_b_PO
dd_prime_OBE
Theta_b_OBE
Theta_a_OBR
dd_PO
db_OBE
db_PO
dd_OBE
Theta_d_OBR
Importance Score

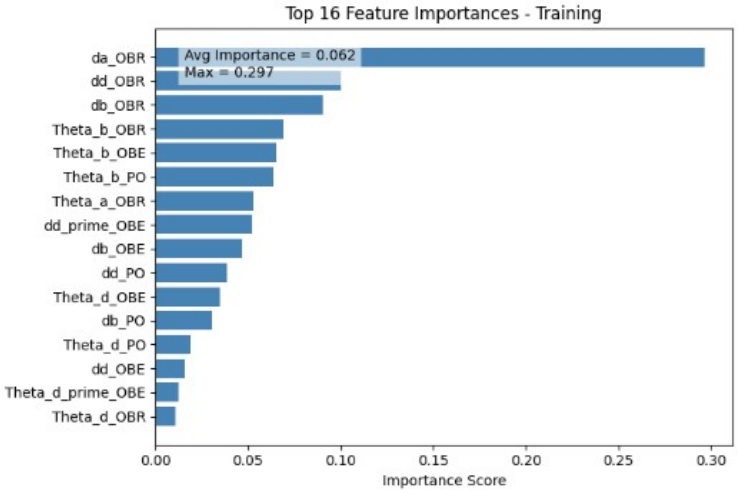

Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value

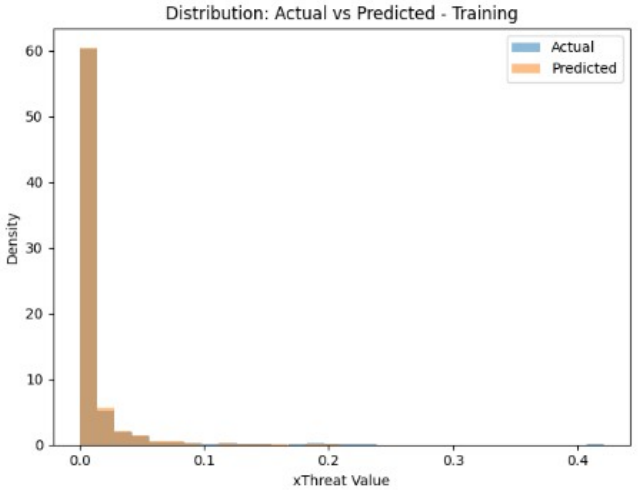

Match 2015213
R² = 0.535
MAE = 0.005
RMSE = 0.022
Predicted
Actual

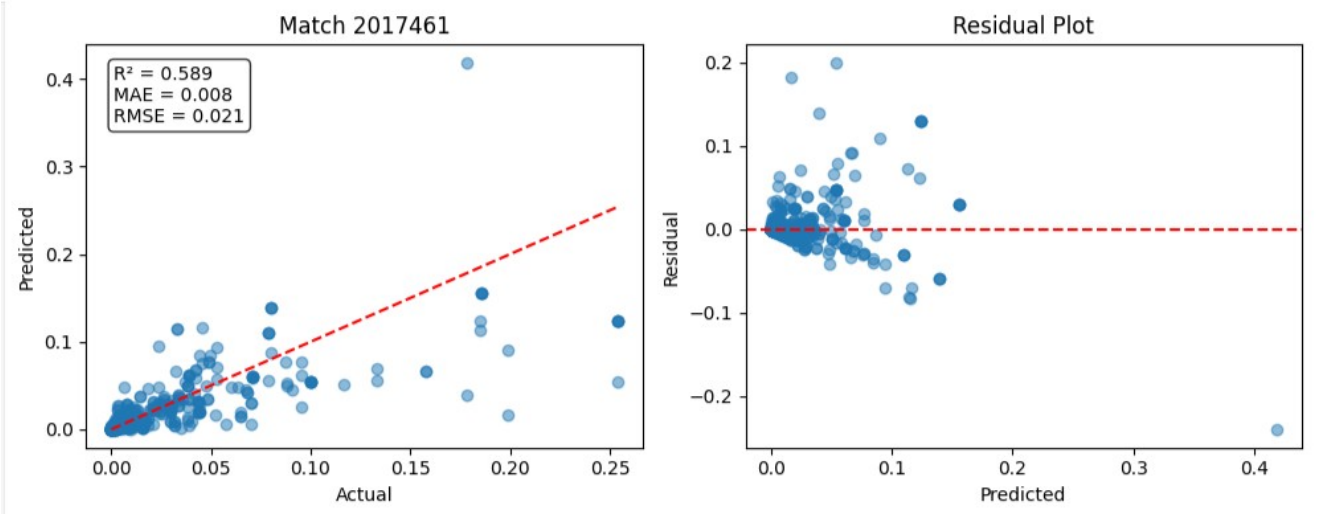

Residual Plot
Residual
Predicted

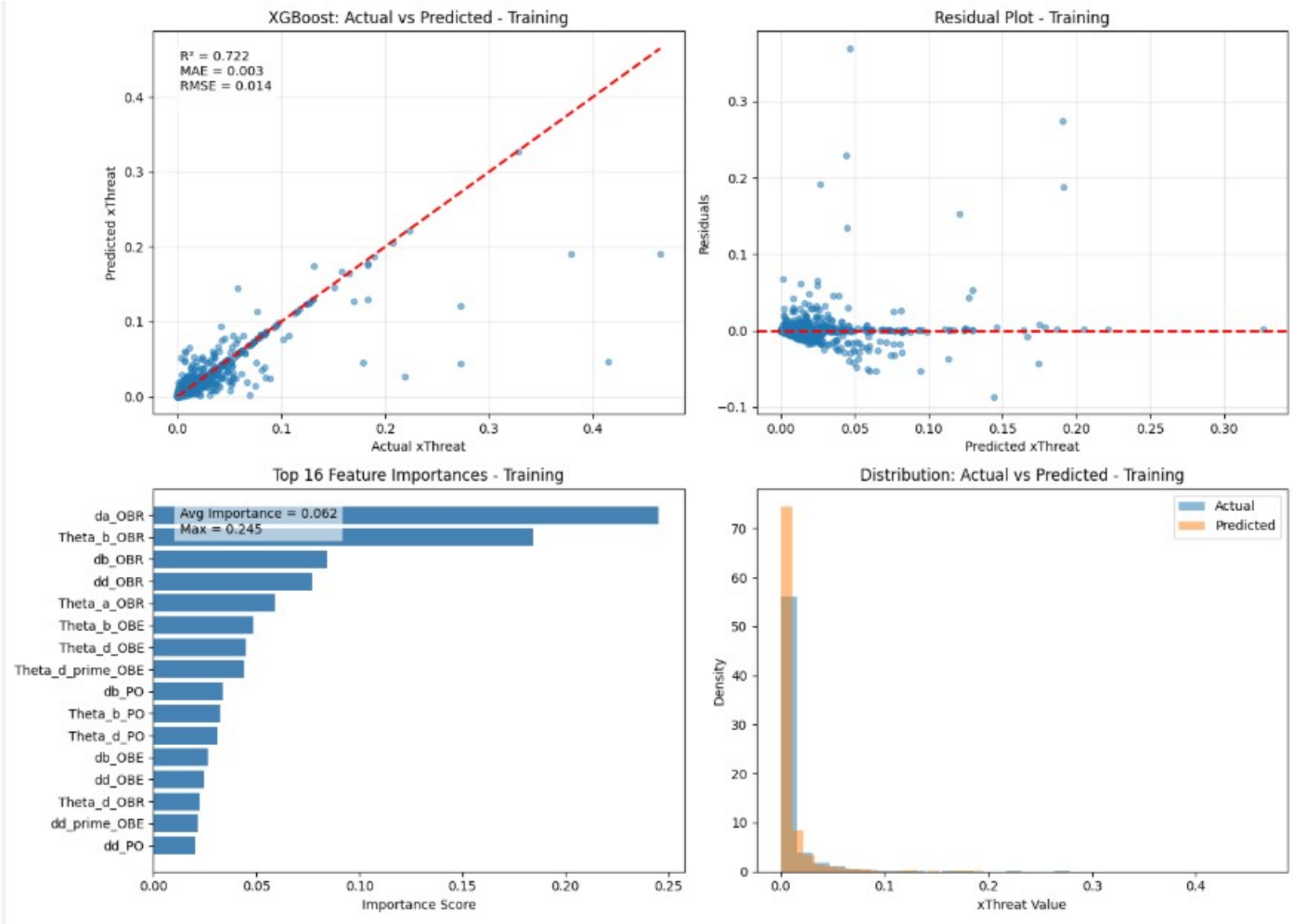

XGBoost: Actual vs Predicted - Training
R² = 0.716
MAE = 0.003
RMSE = 0.014
Predicted xThreat
Actual xThreat


Residual Plot - Training
Residuals
Predicted xThreat


Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.297
da_OBR
dd_OBR
db_OBR
Theta_b_OBR
Theta_b_OBE
Theta_b_PO
Theta_a_OBR
dd_prime_OBE
db_OBE
dd_PO
Theta_d_OBE
db_PO
Theta_d_PO
dd_OBE
Theta_d_prime_OBE
Theta_d_OBR
Importance Score


Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value


Match 2017461
R² = 0.589
MAE = 0.008
RMSE = 0.021
Predicted
Actual
Residual Plot
Residual
Predicted


XGBoost: Actual vs Predicted - Training
R² = 0.722
MAE = 0.003
RMSE = 0.014
Predicted xThreat
Actual xThreat
Residual Plot - Training
Residuals
Predicted xThreat
Top 16 Feature Importances - Training
Avg Importance = 0.062
Max = 0.245
da_OBR
Theta_b_OBR
db_OBR
dd_OBR
Theta_a_OBR
Theta_b_OBE
Theta_d_OBE
Theta_d_prime_OBE
db_PO
Theta_b_PO
Theta_d_PO
db_OBE
dd_OBE
Theta_d_OBR
dd_prime_OBE
dd_PO
Importance Score
Distribution: Actual vs Predicted - Training
Actual
Predicted
Density
xThreat Value