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| --- | --- | --- | --- | --- | --- | --- |
| **Model** | **All Attributes** | **Removing Director** | **Removing Cast** | **Removing Cast and Director** | **Removing Audience Rating** | **Removing Tomatometer Rating** |
| KNN | 0.604554 | 0.506683 | 0.619595 | 0.620544 | 0.603859 | 0.602395 |
| Naive Bayes | 0.497722 | 0.506683 | 0.498226 | 0.523886 | 0.497474 | 0.492899 |
| Random Forest | 0.749257 | 0.743069 | 0.727392 | 0.718028 | 0.735742 | 0.758254 |
| Logistic Regression | 0.506683 | 0.505841 | 0.500866 | 0.549958 | 0.500349 | 0.490903 |
| SVM | 0.506683 | 0.509405 | 0.505363 | 0.586427 | 0.504290 | 0.498944 |

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| **Evaluation Metric** | **All Attributes** | **Removing Director** | **Removing Cast** | **Removing Cast and Director** | **Removing Audience Rating** | **Removing Tomatometer Rating** |
| Accuracy | 0.673515 | 0.663993 | 0.638687 | 0.621648 | 0.664670 | 0.668659 |
| Precision | 0.559222 | 0.550346 | 0.5571278 | 0.5506741 | 0.555896 | 0.556901 |
| Recall | 0.552465 | 0.545995 | 0.5510523 | 0.5476197 | 0.523796 | 0.519786 |
| Specificity | 0.774229 | 0.757342 | 0.7698237 | 0.7455947 | 0.9121201 | 0.92954 |
| F Score | 0.501142 | 0.507441 | 0.5518945 | 0.549732 | 0.496138 | 0.489900 |

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| **Model** | **Accuracy** |
| KNN | 0.604554 |
| Naive Bayes | 0.497722 |
| Random Forest | 0.749257 |
| Logistic Regression | 0.506683 |
| SVM | 0.506683 |

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| **Factors of Influence** | **Accuracy** |
| All Attributes | 0.673515 |
| Removing Director | 0.663993 |
| Removing Cast | 0.638687 |
| Removing Cast and Director | 0.621648 |
| Removing Audience Rating | 0.664670 |
| Removing Tomatometer Rating | 0.668659 |