

# Statistical Classification Metrics

<div><div><div>Sensitivity Recall Power</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>True Positive Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>Precision</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>Positive Predictive Value</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>False Discovery Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>Type I Error α Fall Out</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>False Positive Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>Accuracy</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>F1 Score F Measure</div><div><table><tr><td>2× TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>2× TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>Sørensen–Dice index</div></div></div>	2× TP	FP	FN	TN	2× TP	FP	FN	TN							
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<div><div><div>Type II Error β</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>False Negative Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>True Discovery Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>Negative Predictive Value</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>Specificity</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>True Negative Rate</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN	<div><div><div>Confusion Matrix</div><div><table><tr><td></td><td></td><td colspan="2">actual</td></tr><tr><td></td><td></td><td>T</td><td>F</td></tr><tr><td rowspan="2">predicted</td><td>P</td><td>TP</td><td>FP</td></tr><tr><td>N</td><td>FN</td><td>TN</td></tr></table></div><div>TP: True Positive FP: False Positive FN: False Negative TN: True Negative</div><div>actual = observed predicted = expected</div></div></div>			actual				T	F	predicted	P	TP	FP	N	FN	TN	<div><div><div>Matthews Correlation Coefficient</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>difference of products</div><div><table><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table></div><div>square root of product of sums</div></div></div>	TP	FP	FN	TN	TP	FP	FN	TN
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