

## A Degree of Indifference

Table S1: Degree of indifference with batch-calculated AUC for balanced datasets (50% both classes)

$n$	$d$	$A(a) = A(b)$ $pA(a) = pA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$	$n$	$d$	$A(a) = A(b)$ $bA(a) = bA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$	
4	2		8	360	0.022	4	2	24	360	0.067
4	3		8	360	0.022	4	3	14	360	0.039
6	2	3,080	136,800	0.023	6	2	5,598	136,800	0.041	
6	3	1,992	136,800	0.015	6	3	4,874	136,800	0.036	
6	4	774	136,800	0.006	6	4	1,846	136,800	0.013	
6	5	2,016	136,800	0.015	6	5	4,632	136,800	0.034	
8	2	1,744,596	97,372,800	0.018	8	2	3,040,650	97,372,800	0.031	
8	3	977,371	97,372,800	0.010	8	3	2,130,899	97,372,800	0.022	
8	4	515,962	97,372,800	0.005	8	4	2,417,558	97,372,800	0.025	
8	5	673,976	97,372,800	0.007	8	5	1,369,228	97,372,800	0.014	
8	6	725,592	97,372,800	0.007	8	6	1,538,064	97,372,800	0.016	
8	7	1,767,600	97,372,800	0.018	8	7	3,033,360	97,372,800	0.031	
10	2	1,525,432,958	114,764,428,800	0.013	10	2	2,737,795,920	114,764,428,800	0.024	
10	3	794,657,105	114,764,428,800	0.007	10	3	2,083,703,623	114,764,428,800	0.018	
10	4	413,306,776	114,764,428,800	0.004	10	4	890,459,873	114,764,428,800	0.008	
10	5	604,079,698	114,764,428,800	0.005	10	5	2,285,218,882	114,764,428,800	0.020	
10	6	156,220,714	114,764,428,800	0.001	10	6	409,224,780	114,764,428,800	0.004	
10	7	624,415,704	114,764,428,800	0.005	10	7	1,090,506,552	114,764,428,800	0.010	
10	8	902,736,000	114,764,428,800	0.008	10	8	1,641,371,760	114,764,428,800	0.014	
10	9	1,999,589,760	114,764,428,800	0.017	10	9	3,127,178,880	114,764,428,800	0.027	

Table S2: Degree of Indifference with Batch-calculated AUC for Imbalanced Datasets (34% Minority Class)

$n$	$d$	$A(a) = A(b)$ $pA(a) = pA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$	$n$	$d$	$A(a) = A(b)$ $bA(a) = bA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$	
4	2		0	144	0.000	4	2	0	144	0.000
4	3		0	144	0.000	4	3	0	144	0.000
6	2	1,646	75,600	0.022	6	2	2,662	75,600	0.035	
6	3	820	75,600	0.011	6	3	3,030	75,600	0.040	
6	4	332	75,600	0.004	6	4	850	75,600	0.011	
6	5	912	75,600	0.012	6	5	2,160	75,600	0.029	
8	2	1,129,840	62,092,800	0.018	8	2	1,894,042	62,092,800	0.031	
8	3	593,032	62,092,800	0.010	8	3	1,474,905	62,092,800	0.024	
8	4	275,590	62,092,800	0.004	8	4	507,094	62,092,800	0.008	
8	5	302,360	62,092,800	0.005	8	5	727,836	62,092,800	0.012	
8	6	365,544	62,092,800	0.006	8	6	855,432	62,092,800	0.014	
8	7	989,280	62,092,800	0.016	8	7	1,772,640	62,092,800	0.029	
10	2	385,937,128	25,909,632,000	0.015	10	2	660,637,460	25,909,632,000	0.025	
10	3	191,406,275	25,909,632,000	0.007	10	3	517,685,937	25,909,632,000	0.020	
10	4	66,782,808	25,909,632,000	0.003	10	4	168,622,680	25,909,632,000	0.007	
10	5	115,821,229	25,909,632,000	0.004	10	5	230,520,555	25,909,632,000	0.009	
10	6	79,156,614	25,909,632,000	0.003	10	6	14,018,286	25,909,632,000	0.001	
10	7	47,304,552	25,909,632,000	0.002	10	7	168,801,216	25,909,632,000	0.007	
10	8	196,931,520	25,909,632,000	0.008	10	8	387,977,040	25,909,632,000	0.015	
10	9	457,390,080	25,909,632,000	0.018	10	9	716,728,320	25,909,632,000	0.028	

Table S3: Degree of Indifference with Batch-calculated AUC for Imbalanced Datasets (14% Minority Class)

$n$	$d$	$A(a) = A(b)$ $pA(a) = pA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$	$n$	$d$	$A(a) = A(b)$ $bA(a) = bA(b)$ $a \neq b$	$a \neq b$	$\mathbf{E}$
4	2	0	144	0	4	2	0	144	0
4	3	0	144	0	4	3	0	144	0
6	2	0	10,800	0	6	2	0	10,800	0
6	3	0	10,800	0	6	3	0	10,800	0
6	4	0	10,800	0	6	4	0	10,800	0
6	5	0	10,800	0	6	5	0	10,800	0
8	2	0	1,128,960	0	8	2	0	1,128,960	0
8	3	0	1,128,960	0	8	3	0	1,128,960	0
8	4	0	1,128,960	0	8	4	0	1,128,960	0
8	5	0	1,128,960	0	8	5	0	1,128,960	0
8	6	0	1,128,960	0	8	6	0	1,128,960	0
8	7	0	1,128,960	0	8	7	0	1,128,960	0
10	2	0	163,296,000	0	10	2	0	163,296,000	0
10	3	0	163,296,000	0	10	3	0	163,296,000	0
10	4	0	163,296,000	0	10	4	0	163,296,000	0
10	5	0	163,296,000	0	10	5	0	163,296,000	0
10	6	0	163,296,000	0	10	6	0	163,296,000	0
10	7	0	163,296,000	0	10	7	0	163,296,000	0
10	8	0	163,296,000	0	10	8	0	163,296,000	0
10	9	0	163,296,000	0	10	9	0	163,296,000	0

## B Additional Figures

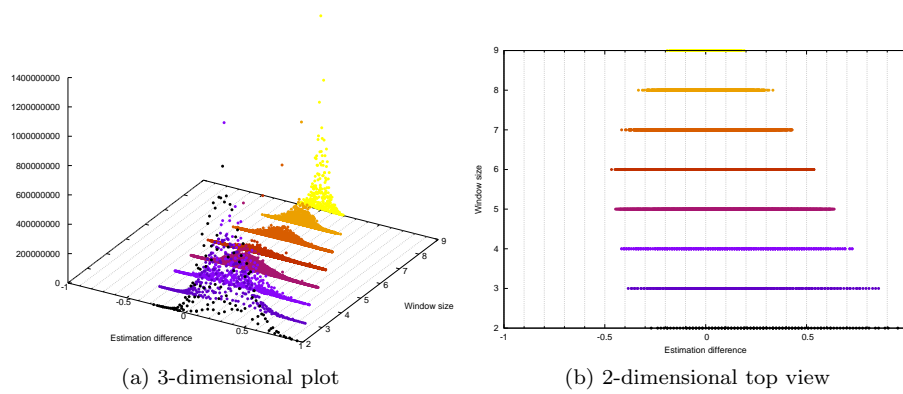


Fig. S1: Differences between prequential and batch AUC for different window sizes on the largest dataset with medium class imbalance (34% minority class examples)

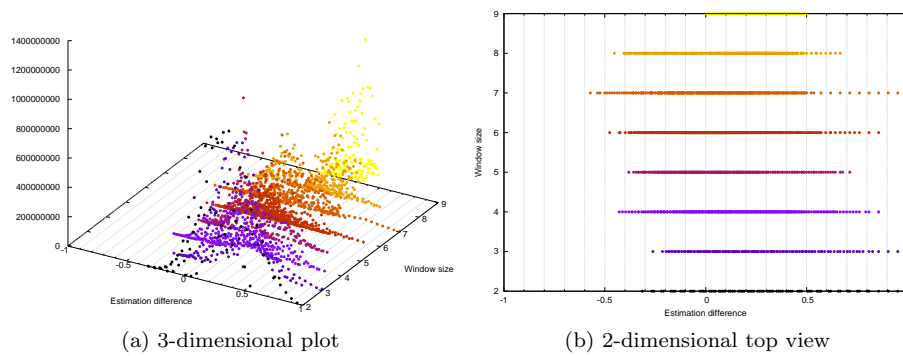


Fig. S2: Differences between block and batch AUC for different window sizes on the largest dataset with medium class imbalance (34% minority class examples)

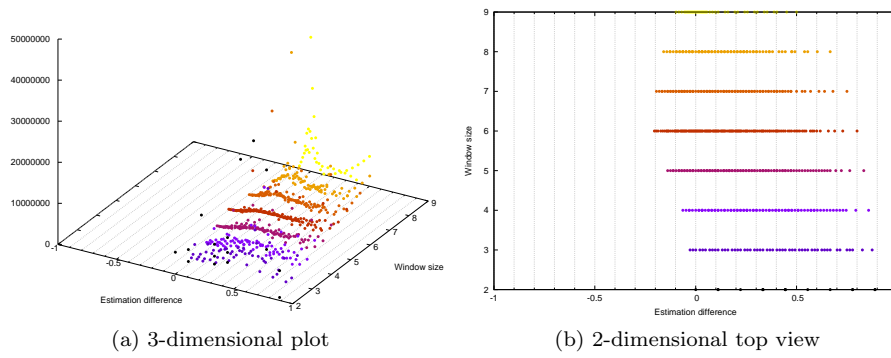


Fig. S3: Differences between prequential and batch AUC for different window sizes on the largest dataset with high class imbalance (14% minority class examples)

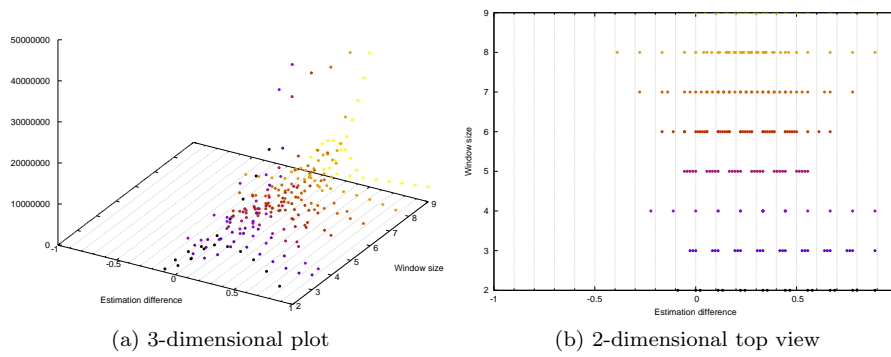


Fig. S4: Differences between block and batch AUC for different window sizes on the largest dataset with high class imbalance (14% minority class examples)

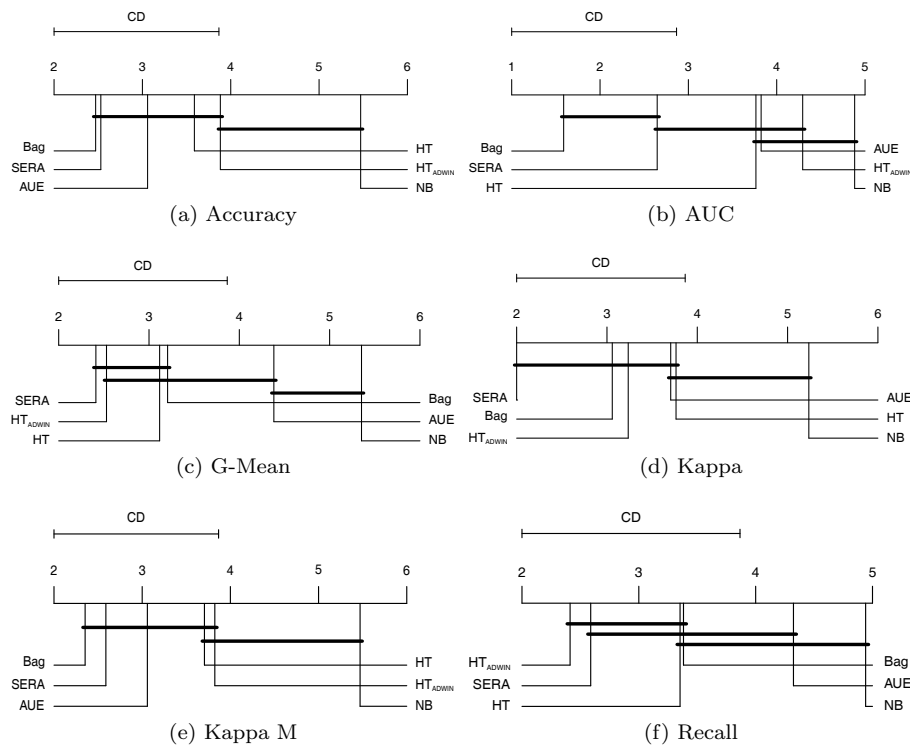


Fig. S5: Comparison of all classifiers with the Nemenyi test (the lower the rank the better). Groups of classifiers that are not significantly different (at  $\alpha = 0.05$ ) are connected.