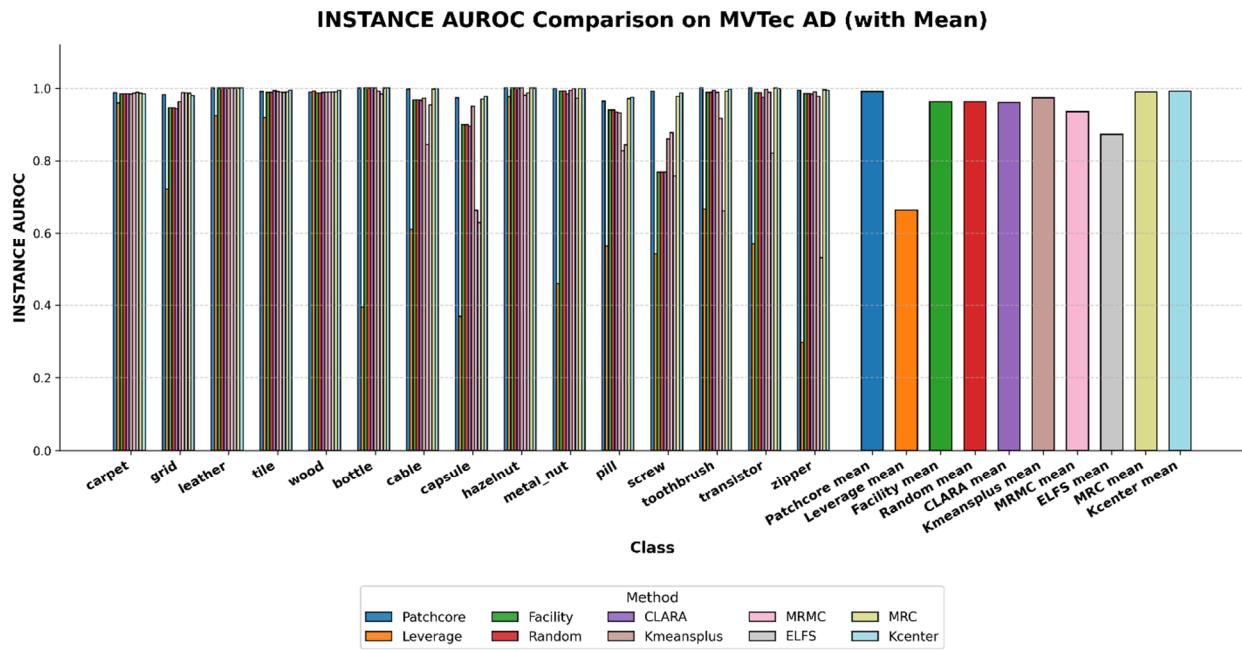


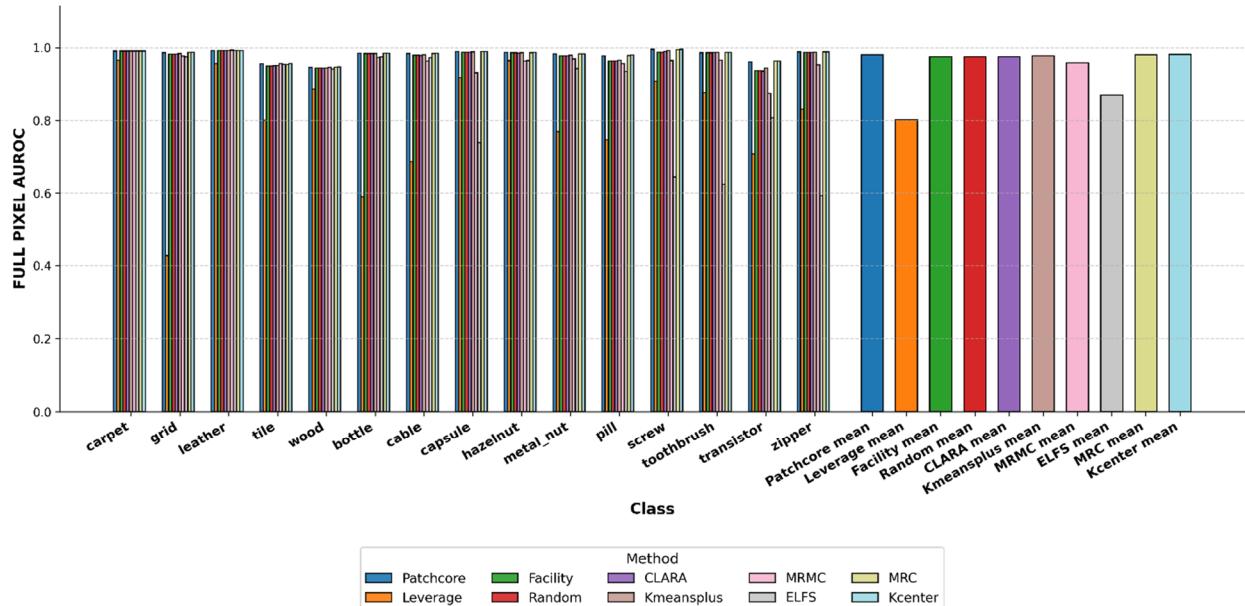
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Top-3 methods by mean INSTANCE AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9876	0.9595	0.9848	0.9848	0.9843	0.9835	0.986	0.9884	0.9864	0.9843
grid	0.9825	0.7218	0.9465	0.9465	0.944	0.9624	0.9875	0.9866	0.9858	0.9799
leather	1	0.9246	1	1	1	1	1	1	1	1
tile	0.9906	0.9188	0.9888	0.9888	0.9935	0.991	0.9895	0.9885	0.9899	0.9949
wood	0.9895	0.9921	0.9868	0.9868	0.9886	0.9895	0.9895	0.9904	0.9904	0.9939
bottle	1	0.3944	1	1	1	1	0.9913	0.9841	1	1
cable	0.9978	0.6115	0.9683	0.9683	0.9668	0.973	0.8446	0.9539	0.9981	0.9993
capsule	0.9733	0.3686	0.8995	0.8995	0.8951	0.9501	0.6629	0.629	0.9701	0.9777
hazelnut	1	0.9771	1	1	1	1	0.9807	0.9868	1	1
metal_nut	0.9995	0.4585	0.9927	0.9927	0.9848	0.9936	0.999	0.9717	0.9995	0.999
pill	0.9645	0.5619	0.9403	0.9403	0.9348	0.9318	0.8271	0.844	0.9716	0.9755
screw	0.9916	0.5409	0.7686	0.7686	0.7682	0.8598	0.8774	0.7584	0.9777	0.9867
toothbrush	1	0.6667	0.9889	0.9889	0.9944	0.9889	0.9167	0.6611	0.9917	0.9972
transistor	1	0.5679	0.9875	0.9875	0.975	0.9967	0.9883	0.8213	1	0.9992
zipper	0.9947	0.2978	0.9856	0.9856	0.9842	0.9898	0.9772	0.5299	0.9953	0.9942
mean	0.991	0.664	0.963	0.963	0.961	0.974	0.935	0.873	0.99	0.992

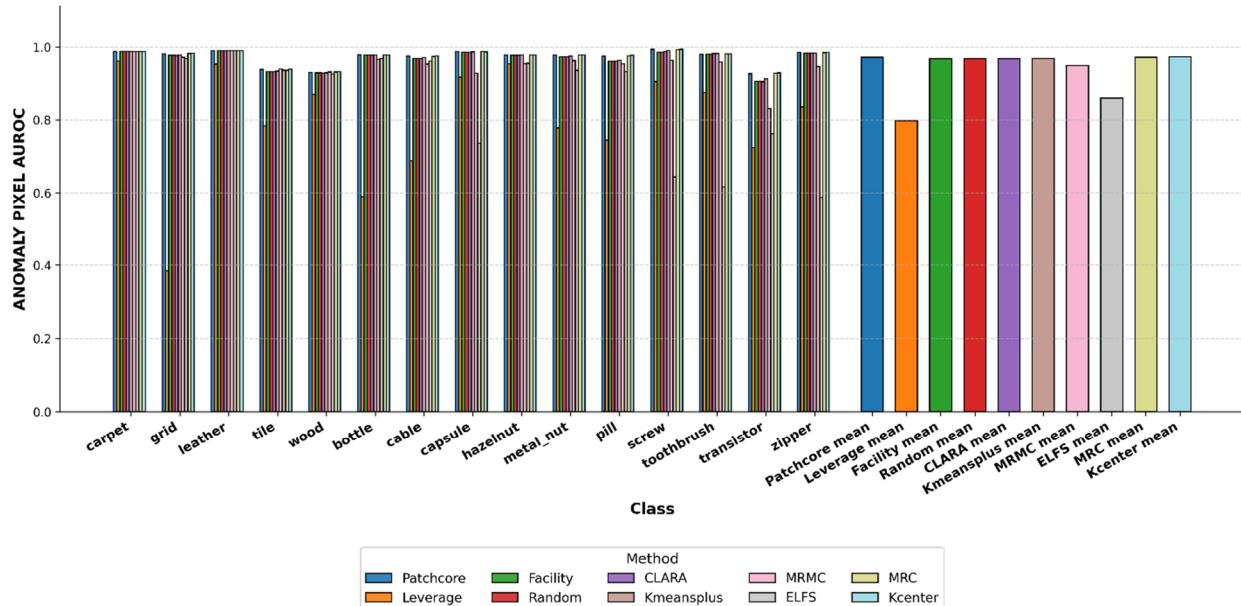
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9905	0.9647	0.9905	0.9905	0.9905	0.9904	0.9904	0.9903	0.9905	0.9905
grid	0.9858	0.4265	0.9823	0.9823	0.9817	0.9832	0.9766	0.9741	0.9863	0.9871
leather	0.9923	0.9564	0.9922	0.9922	0.9922	0.9922	0.9925	0.9924	0.9923	0.9924
tile	0.9552	0.8002	0.9491	0.9491	0.9498	0.9507	0.9564	0.9535	0.9529	0.9561
wood	0.9454	0.8862	0.9435	0.9435	0.943	0.9436	0.9457	0.9409	0.9458	0.9472
bottle	0.984	0.59	0.9834	0.9834	0.9831	0.9835	0.9725	0.9741	0.9839	0.9839
cable	0.9838	0.6867	0.9785	0.9785	0.9783	0.9801	0.9634	0.9715	0.9836	0.9844
capsule	0.9892	0.9171	0.9874	0.9874	0.9874	0.9885	0.9306	0.739	0.9893	0.9891
hazelnut	0.9862	0.9642	0.9856	0.9856	0.9854	0.9859	0.9629	0.9639	0.9861	0.9863
metal_nut	0.9826	0.7693	0.9775	0.9775	0.9775	0.9791	0.9684	0.9425	0.9826	0.9826
pill	0.977	0.7471	0.9629	0.9629	0.9634	0.9649	0.9561	0.9342	0.9777	0.9793
screw	0.9949	0.9073	0.9876	0.9876	0.9896	0.9919	0.964	0.6449	0.9946	0.9949
toothbrush	0.9861	0.8761	0.9857	0.9857	0.9868	0.9869	0.9656	0.6244	0.9864	0.9863
transistor	0.9605	0.7077	0.9364	0.9364	0.9352	0.9437	0.8741	0.8072	0.963	0.9635
zipper	0.9882	0.8309	0.9869	0.9869	0.9869	0.9872	0.9524	0.5936	0.9878	0.9883
mean	0.98	0.802	0.975	0.975	0.975	0.977	0.958	0.87	0.98	0.981

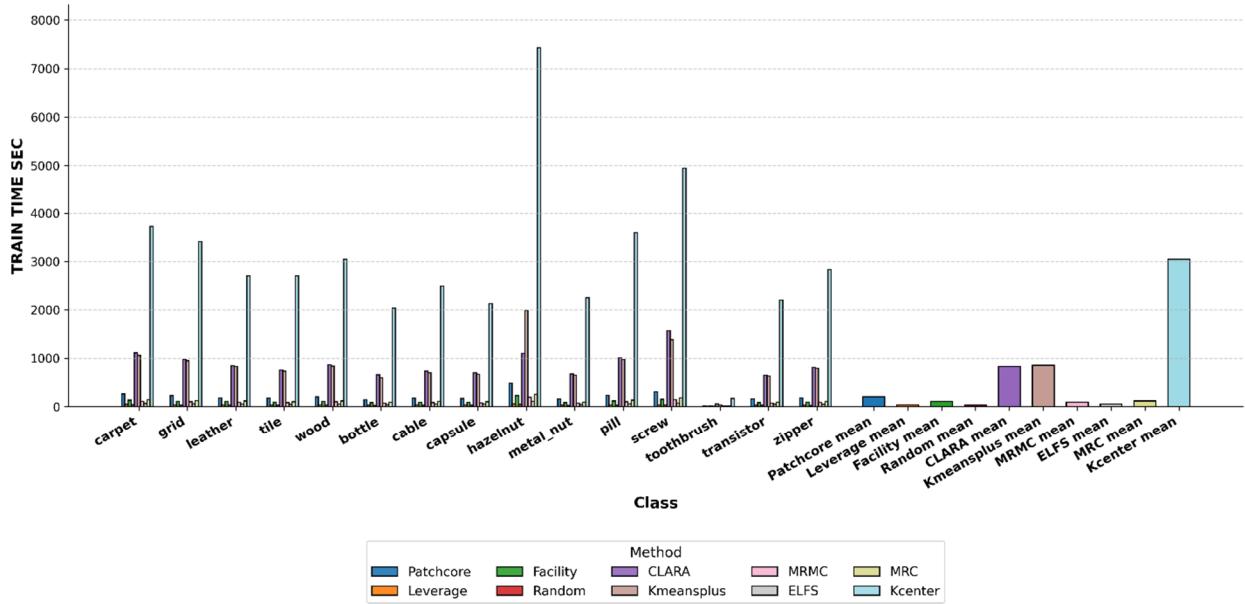
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9878	0.9618	0.9879	0.9879	0.9878	0.9878	0.9877	0.9875	0.9878	0.9877
grid	0.981	0.385	0.9772	0.9772	0.9766	0.9781	0.9719	0.9683	0.9816	0.9825
leather	0.9896	0.9533	0.9895	0.9895	0.9895	0.9894	0.9899	0.9898	0.9896	0.9897
tile	0.9382	0.7843	0.9319	0.9319	0.9324	0.9336	0.9396	0.9364	0.9359	0.9393
wood	0.9307	0.8703	0.9289	0.9289	0.9283	0.9289	0.931	0.9263	0.9313	0.9325
bottle	0.9784	0.5894	0.9777	0.9777	0.9774	0.9778	0.9653	0.9676	0.9783	0.9783
cable	0.9746	0.6881	0.969	0.969	0.9688	0.9708	0.9528	0.961	0.9745	0.9753
capsule	0.987	0.9175	0.9854	0.9854	0.9852	0.9863	0.9283	0.736	0.9871	0.9869
hazelnut	0.9782	0.9542	0.9775	0.9775	0.9772	0.9778	0.955	0.9558	0.9781	0.9783
metal_nut	0.9783	0.7782	0.9737	0.9737	0.9737	0.9752	0.9624	0.9359	0.9782	0.9781
pill	0.975	0.7447	0.961	0.961	0.9614	0.9629	0.9541	0.9322	0.9757	0.9774
screw	0.9933	0.905	0.9857	0.9857	0.9879	0.9901	0.9633	0.6438	0.993	0.9933
toothbrush	0.9805	0.8748	0.9804	0.9804	0.9817	0.9818	0.959	0.6162	0.9808	0.9808
transistor	0.9266	0.7237	0.906	0.906	0.905	0.9124	0.8311	0.7619	0.9286	0.9289
zipper	0.985	0.8356	0.9835	0.9835	0.9835	0.9838	0.946	0.5874	0.9846	0.9852
mean	0.972	0.798	0.968	0.968	0.968	0.969	0.949	0.86	0.972	0.973

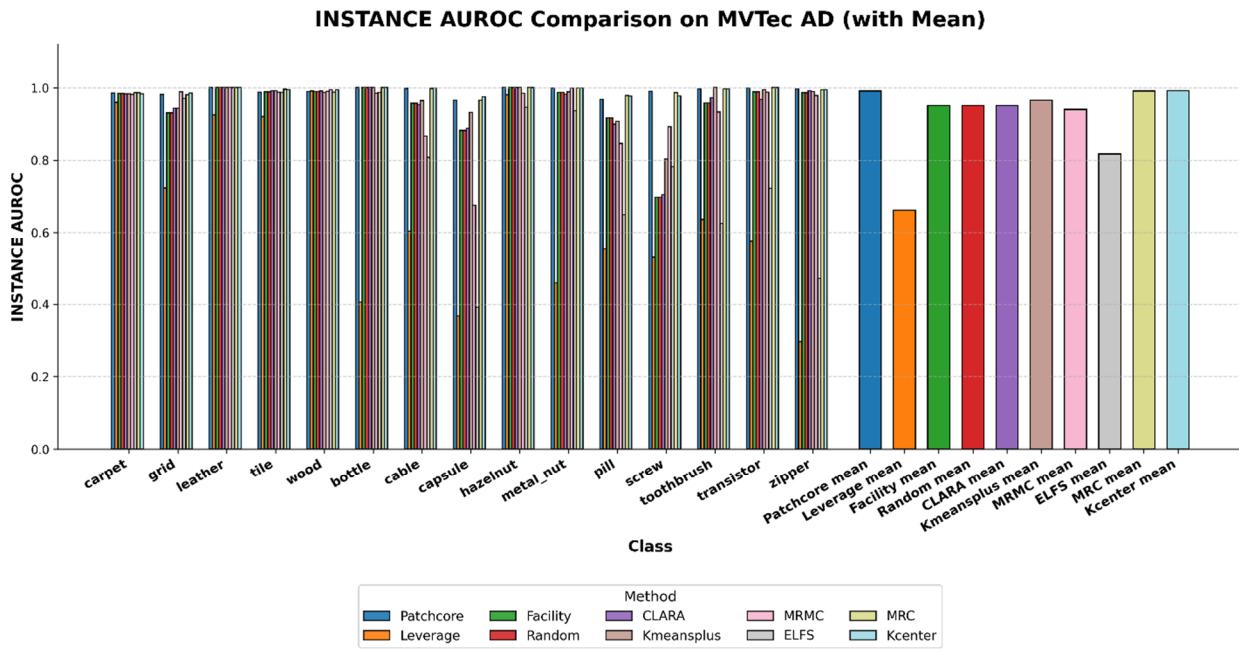
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > Leverage > ELFS

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	259.2949	44.3285	131.2164	39.4192	1111.786	1058.056	112.8503	65.4321	142.1945	3727.636
grid	226.7484	35.6961	113.138	27.2915	978.2396	944.7721	97.225	58.3551	122.9155	3411.067
leather	182.791	36.811	103.4092	32.522	841.9585	829.675	88.225	52.5939	117.4256	2701.953
tile	175.4797	29.1723	90.545	28.7505	753.193	734.217	83.8496	46.4372	99.7181	2700.809
wood	201.2217	34.3416	103.2711	35.5213	864.7566	839.2807	97.5967	52.7837	116.0408	3043.984
bottle	139.2771	26.9627	79.1445	24.7078	658.1201	595.9682	68.686	42.2696	86.5951	2034.777
cable	175.5533	35.2782	89.2732	31.8627	734.9583	700.1119	82.7216	50.128	103.0404	2495.226
capsule	168.6221	32.1386	86.541	30.7058	697.3405	669.8551	75.6713	51.5244	99.9916	2128.115
hazelnut	484.6867	60.7261	227.8948	54.3758	1096.533	1990.08	194.462	111.2849	255.8196	7426.272
metal_nut	154.546	29.4554	82.5085	22.2749	675.0414	653.8044	71.5579	40.1993	94.95	2250.204
pill	230.3128	37.582	116.2967	30.6292	1003.678	972.1231	99.5629	56.9327	132.3446	3595.005
screw	309.3871	36.408	153.3734	34.7038	1568.186	1380.918	139.7063	71.5435	178.4189	4946.595
toothbrush	18.6787	7.8741	12.7379	8.2512	58.2835	33.1426	12.5129	8.9038	13.3772	167.2467
transistor	155.3883	28.9159	83.1961	30.1964	652.6028	634.0668	71.7418	44.211	90.7837	2204.777
zipper	183.0212	27.3783	92.1779	24.7341	805.5157	792.6854	88.5725	45.1734	104.3635	2827.845
mean	204.334	33.538	104.315	30.396	833.346	855.25	92.329	53.185	117.199	3044.101

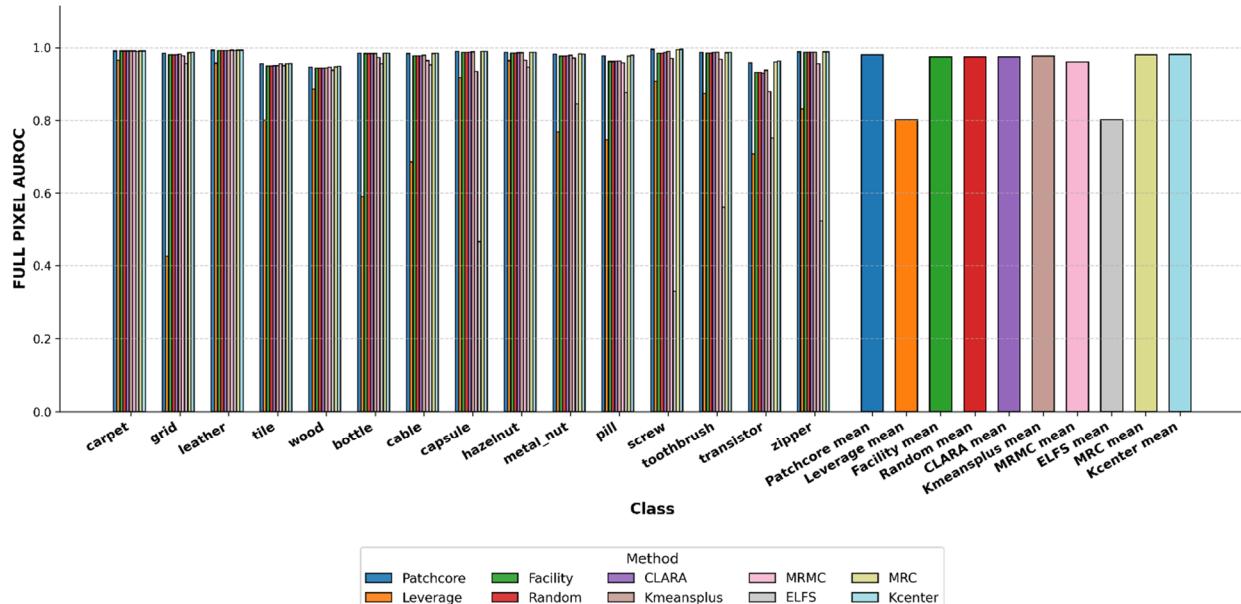
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Top-3 methods by mean INSTANCE AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9852	0.9599	0.9839	0.9839	0.9831	0.9827	0.9811	0.9864	0.9864	0.9827
grid	0.9816	0.7235	0.9307	0.9307	0.9432	0.9432	0.9883	0.9708	0.9808	0.985
leather	1	0.9249	1	1	1	1	1	1	1	1
tile	0.9874	0.9203	0.9885	0.9885	0.9917	0.9913	0.9881	0.987	0.9957	0.9946
wood	0.9895	0.9912	0.9895	0.9895	0.9912	0.9868	0.9904	0.9947	0.9877	0.9947
bottle	1	0.4063	1	1	1	1	0.9849	0.9873	1	1
cable	0.9978	0.6046	0.9571	0.9571	0.9535	0.964	0.8666	0.8077	0.9978	0.9994
capsule	0.9661	0.3678	0.8823	0.8823	0.8883	0.9318	0.6753	0.3917	0.9661	0.9753
hazelnut	1	0.9804	1	1	1	1	0.9846	0.9464	1	1
metal_nut	0.9995	0.4585	0.9873	0.9873	0.9824	0.9888	0.999	0.937	0.9995	0.9995
pill	0.9684	0.5526	0.9163	0.9163	0.8991	0.907	0.8459	0.65	0.9787	0.9771
screw	0.9904	0.5302	0.6971	0.6971	0.7051	0.803	0.892	0.7817	0.9863	0.9779
toothbrush	0.9972	0.6361	0.9583	0.9583	0.9722	1	0.9333	0.625	0.9972	0.9972
transistor	0.9996	0.5737	0.9883	0.9883	0.9683	0.995	0.9879	0.7221	1	1
zipper	0.9961	0.2967	0.9863	0.9863	0.9919	0.989	0.9785	0.4709	0.994	0.9947
mean	0.991	0.662	0.951	0.951	0.951	0.966	0.94	0.817	0.991	0.992

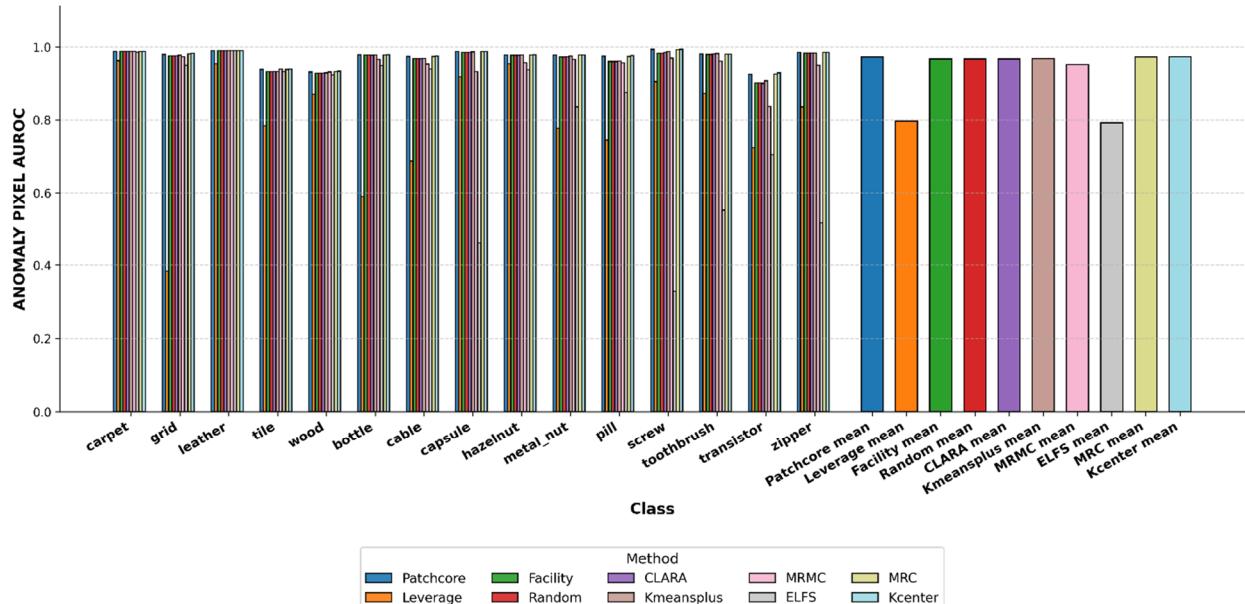
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9905	0.9648	0.9905	0.9905	0.9905	0.9906	0.9903	0.9887	0.9902	0.9904
grid	0.9841	0.4254	0.9803	0.9803	0.9804	0.9821	0.9774	0.9563	0.9855	0.9868
leather	0.9924	0.9565	0.9922	0.9922	0.9922	0.9921	0.9925	0.9922	0.9923	0.9924
tile	0.9549	0.8006	0.9494	0.9494	0.95	0.9498	0.9556	0.9497	0.955	0.956
wood	0.9457	0.8862	0.9427	0.9427	0.943	0.9437	0.9457	0.9375	0.9466	0.9479
bottle	0.984	0.5909	0.9832	0.9832	0.9831	0.9834	0.9726	0.9551	0.9837	0.9838
cable	0.983	0.6858	0.9772	0.9772	0.9771	0.9783	0.964	0.9518	0.9834	0.9842
capsule	0.9892	0.9173	0.9865	0.9865	0.9869	0.9882	0.9341	0.4646	0.9893	0.9892
hazelnut	0.986	0.964	0.9852	0.9852	0.9853	0.9857	0.9645	0.9459	0.9861	0.9863
metal_nut	0.9821	0.7684	0.9763	0.9763	0.9767	0.9783	0.9711	0.8452	0.9822	0.9821
pill	0.9769	0.7468	0.9616	0.9616	0.9623	0.9634	0.9578	0.8768	0.9761	0.9783
screw	0.9947	0.907	0.9843	0.9843	0.9864	0.9893	0.9701	0.3292	0.9942	0.9946
toothbrush	0.9863	0.8742	0.9849	0.9849	0.9864	0.9869	0.9675	0.5589	0.9857	0.986
transistor	0.9582	0.7073	0.9315	0.9315	0.9293	0.9375	0.8792	0.7511	0.9598	0.9634
zipper	0.9881	0.8312	0.9868	0.9868	0.987	0.9869	0.9556	0.5217	0.9878	0.9881
mean	0.98	0.802	0.974	0.974	0.974	0.976	0.96	0.802	0.98	0.981

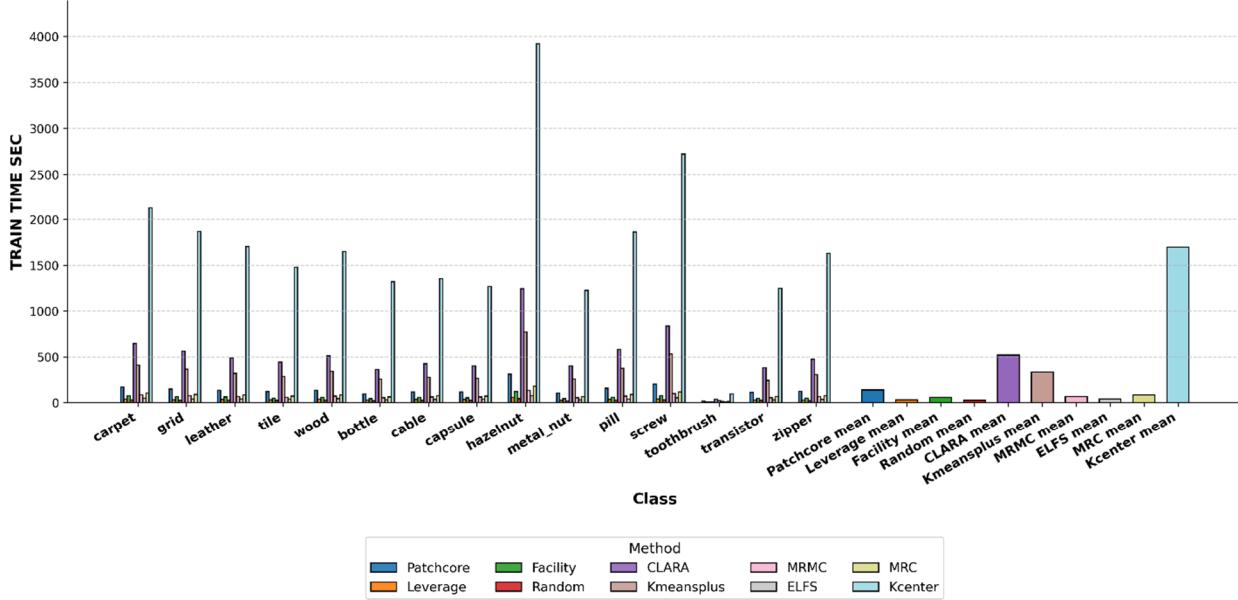
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9878	0.9619	0.9879	0.9879	0.9879	0.988	0.9876	0.9859	0.9875	0.9877
grid	0.9791	0.3838	0.9751	0.9751	0.9755	0.9771	0.9729	0.9498	0.9807	0.9821
leather	0.9897	0.9534	0.9894	0.9894	0.9894	0.9894	0.9898	0.9894	0.9896	0.9897
tile	0.9379	0.7846	0.932	0.932	0.9325	0.9324	0.9388	0.9322	0.9379	0.9392
wood	0.931	0.8703	0.928	0.928	0.9283	0.929	0.931	0.9232	0.9321	0.9333
bottle	0.9784	0.5903	0.9775	0.9775	0.9773	0.9777	0.9654	0.9488	0.978	0.9782
cable	0.9736	0.6874	0.9676	0.9676	0.9678	0.9688	0.9533	0.9397	0.9741	0.9749
capsule	0.987	0.9178	0.9845	0.9845	0.9848	0.986	0.9317	0.4611	0.9872	0.987
hazelnut	0.9779	0.954	0.9769	0.9769	0.977	0.9776	0.9566	0.9377	0.978	0.9784
metal_nut	0.9778	0.7773	0.9725	0.9725	0.9729	0.9745	0.9653	0.8359	0.9776	0.9776
pill	0.9749	0.7444	0.9597	0.9597	0.9603	0.9615	0.9558	0.8753	0.9742	0.9764
screw	0.9931	0.9047	0.9827	0.9827	0.9849	0.9875	0.9694	0.3288	0.9926	0.993
toothbrush	0.9808	0.8731	0.9797	0.9797	0.9813	0.9818	0.961	0.5503	0.98	0.9804
transistor	0.9248	0.7234	0.902	0.902	0.9001	0.9068	0.8368	0.7046	0.9257	0.9286
zipper	0.985	0.8358	0.9834	0.9834	0.9836	0.9835	0.9495	0.5155	0.9846	0.985
mean	0.972	0.797	0.967	0.967	0.967	0.968	0.951	0.792	0.972	0.973

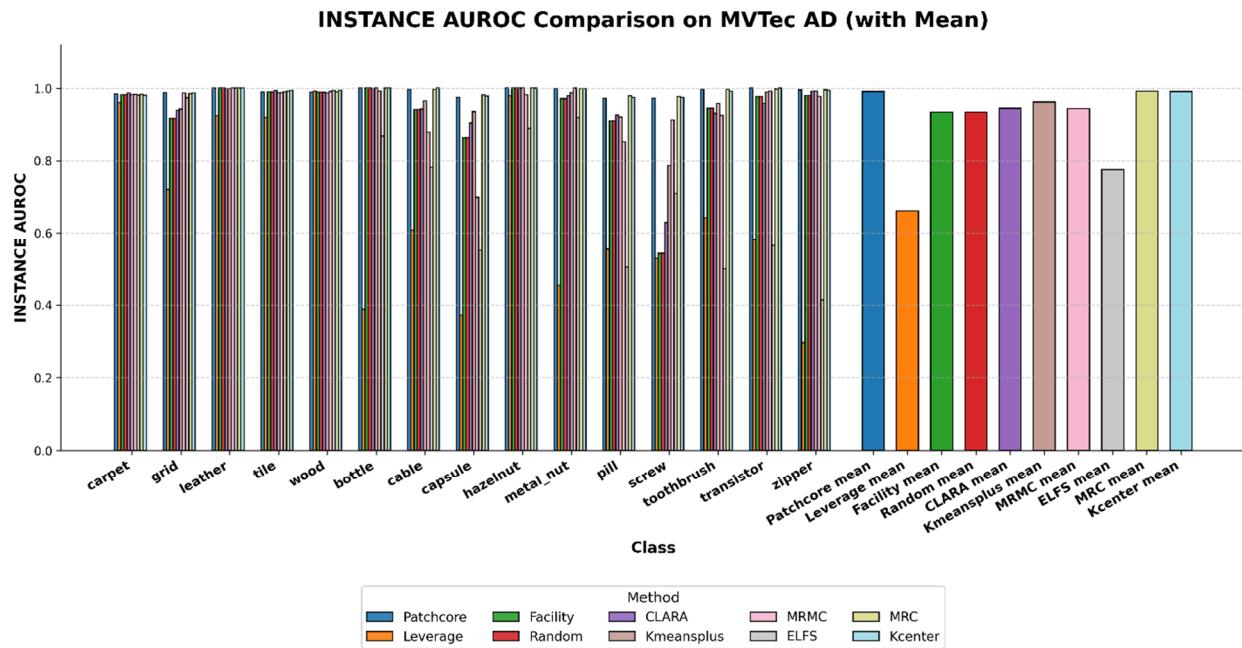
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > Leverage > ELFS

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	170.6313	38.2061	73.1912	31.7521	642.7668	407.605	87.0275	50.1492	104.7754	2126.417
grid	146.9908	29.4433	64.109	26.0249	562.689	366.4099	73.6118	40.5424	89.1883	1869.357
leather	136.455	32.5985	61.0562	26.3643	488.8014	318.8957	68.5572	41.3984	82.41	1701.145
tile	118.6782	29.2259	48.8628	23.5107	441.4694	283.9897	55.5934	37.6778	72.019	1478.118
wood	134.5684	36.4781	59.0703	28.9862	509.4176	339.3781	71.9263	43.2554	84.0283	1649.008
bottle	96.2015	26.5461	43.594	20.114	360.7147	255.6408	50.6258	31.5382	61.0952	1320.022
cable	115.6682	35.1986	53.7709	25.6095	422.3651	275.5252	62.1148	35.1163	73.8192	1354.169
capsule	117.8463	33.5759	52.3929	24.9753	402.0449	263.9366	59.8442	38.1391	71.2606	1267.376
hazelnut	309.4829	55.9932	119.6537	44.2791	1241.733	769.5009	132.8662	72.2374	178.4913	3919.456
metal_nut	104.4452	24.7948	43.674	19.6824	401.6722	257.7167	51.6632	30.8252	64.3018	1223.659
pill	156.4857	33.3565	59.0109	27.8021	579.6009	374.5383	69.1522	37.5448	90.2824	1860.89
screw	203.848	38.5509	77.786	29.9419	833.3258	529.643	98.6403	51.6062	117.1923	2721.135
toothbrush	14.6368	7.3907	9.7031	6.6838	38.2401	21.0407	11.0506	7.6008	11.3835	96.0949
transistor	110.6284	28.7805	46.2274	24.2492	380.5757	241.6795	51.3075	30.6108	68.0955	1245.02
zipper	122.6249	27.4	48.0327	21.5196	472.3173	307.7151	63.2072	32.8166	72.7514	1629.924
mean	137.279	31.836	57.342	25.433	518.516	334.214	67.146	38.737	82.74	1697.453

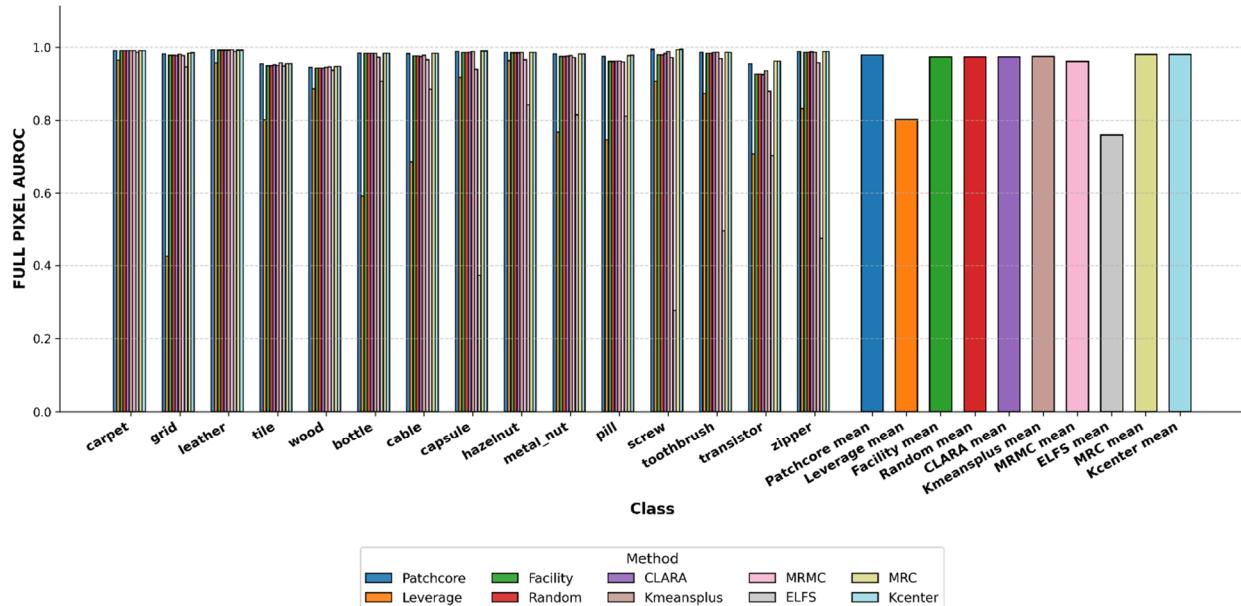
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Top-3 methods by mean INSTANCE AUROC: MRC > Patchcore > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9843	0.9607	0.9823	0.9823	0.9872	0.9823	0.9827	0.9803	0.9831	0.9807
grid	0.9875	0.721	0.9165	0.9165	0.939	0.9424	0.9866	0.9733	0.985	0.9866
leather	1	0.9243	1	1	0.9997	0.9997	1	1	1	1
tile	0.9903	0.9199	0.9899	0.9899	0.9939	0.9881	0.9874	0.9899	0.9924	0.9939
wood	0.9895	0.9921	0.9895	0.9895	0.9886	0.9868	0.9912	0.9939	0.9904	0.9947
bottle	1	0.3881	1	1	0.9984	1	0.9921	0.8683	1	1
cable	0.9966	0.6093	0.9419	0.9419	0.9427	0.9653	0.8787	0.7819	0.9968	1
capsule	0.9753	0.3718	0.8636	0.8636	0.9043	0.935	0.6988	0.5509	0.9817	0.9785
hazelnut	1	0.9793	1	1	1	1	0.9821	0.8889	1	1
metal_nut	0.9995	0.4541	0.9712	0.9712	0.979	0.9878	1	0.9189	0.9995	0.9995
pill	0.9719	0.5543	0.91	0.91	0.9258	0.9201	0.8524	0.5044	0.979	0.9741
screw	0.9727	0.5282	0.5421	0.5421	0.629	0.7868	0.9129	0.7096	0.9766	0.9742
toothbrush	0.9972	0.6417	0.9444	0.9444	0.9306	0.9583	0.925	0.5	0.9972	0.9917
transistor	1	0.5808	0.9771	0.9771	0.9583	0.9892	0.9925	0.5646	0.9979	1
zipper	0.9955	0.2965	0.98	0.98	0.9916	0.9921	0.9779	0.4139	0.9953	0.995
mean	0.991	0.661	0.934	0.934	0.945	0.962	0.944	0.776	0.992	0.991

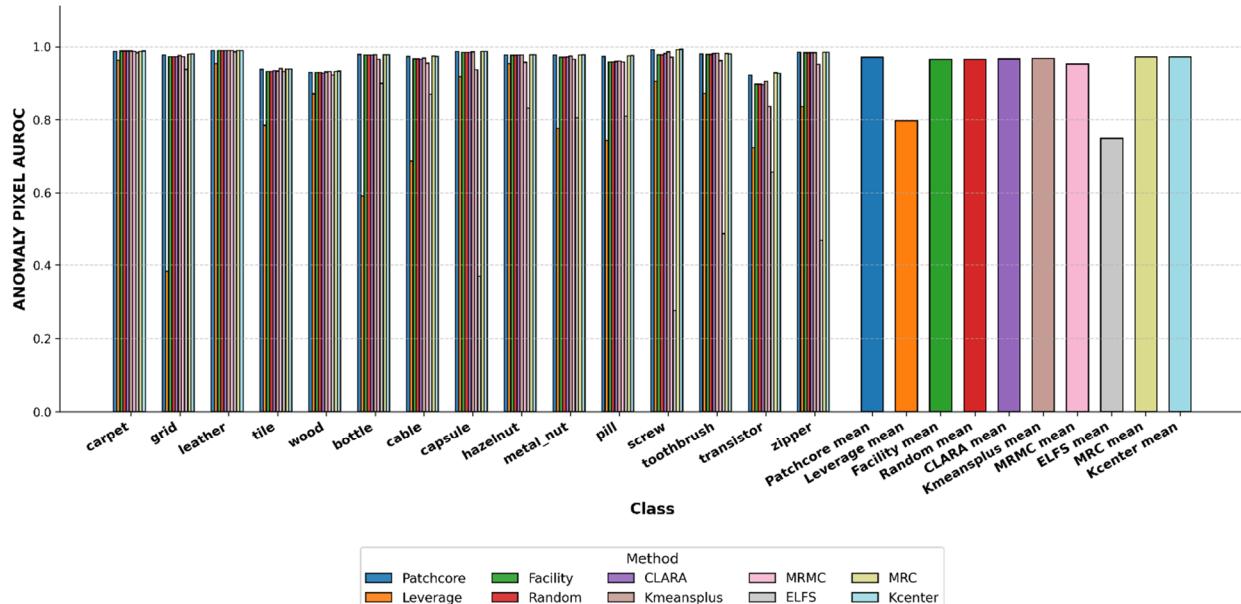
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9904	0.9648	0.9905	0.9905	0.9907	0.9905	0.9902	0.9859	0.9901	0.9904
grid	0.9819	0.4246	0.9777	0.9777	0.9774	0.9807	0.9775	0.9462	0.9845	0.9851
leather	0.9924	0.9567	0.9922	0.9922	0.9921	0.9922	0.9925	0.989	0.9923	0.9923
tile	0.9546	0.8008	0.9495	0.9495	0.9514	0.9501	0.9567	0.9486	0.955	0.9552
wood	0.9448	0.8864	0.9432	0.9432	0.9425	0.9447	0.9463	0.9367	0.9465	0.9476
bottle	0.9839	0.5917	0.983	0.983	0.983	0.9833	0.9723	0.906	0.9837	0.9837
cable	0.9824	0.6853	0.9761	0.9761	0.9749	0.9777	0.9655	0.8844	0.9831	0.983
capsule	0.989	0.9174	0.9859	0.9859	0.9863	0.9878	0.9389	0.3729	0.9892	0.9892
hazelnut	0.9856	0.9635	0.985	0.985	0.9851	0.9855	0.9655	0.8414	0.9859	0.9859
metal_nut	0.9819	0.7672	0.975	0.975	0.9755	0.9775	0.9713	0.8143	0.9816	0.9821
pill	0.975	0.7461	0.9605	0.9605	0.9614	0.9625	0.9595	0.8108	0.977	0.9778
screw	0.9939	0.9072	0.9794	0.9794	0.9823	0.9878	0.9717	0.2773	0.9934	0.994
toothbrush	0.9861	0.8731	0.9835	0.9835	0.9859	0.9865	0.9685	0.4941	0.9862	0.9857
transistor	0.9548	0.707	0.9263	0.9263	0.925	0.9355	0.8793	0.7023	0.9616	0.9619
zipper	0.9883	0.8313	0.9867	0.9867	0.9869	0.9868	0.9578	0.474	0.9878	0.9882
mean	0.979	0.802	0.973	0.973	0.973	0.975	0.961	0.759	0.98	0.98

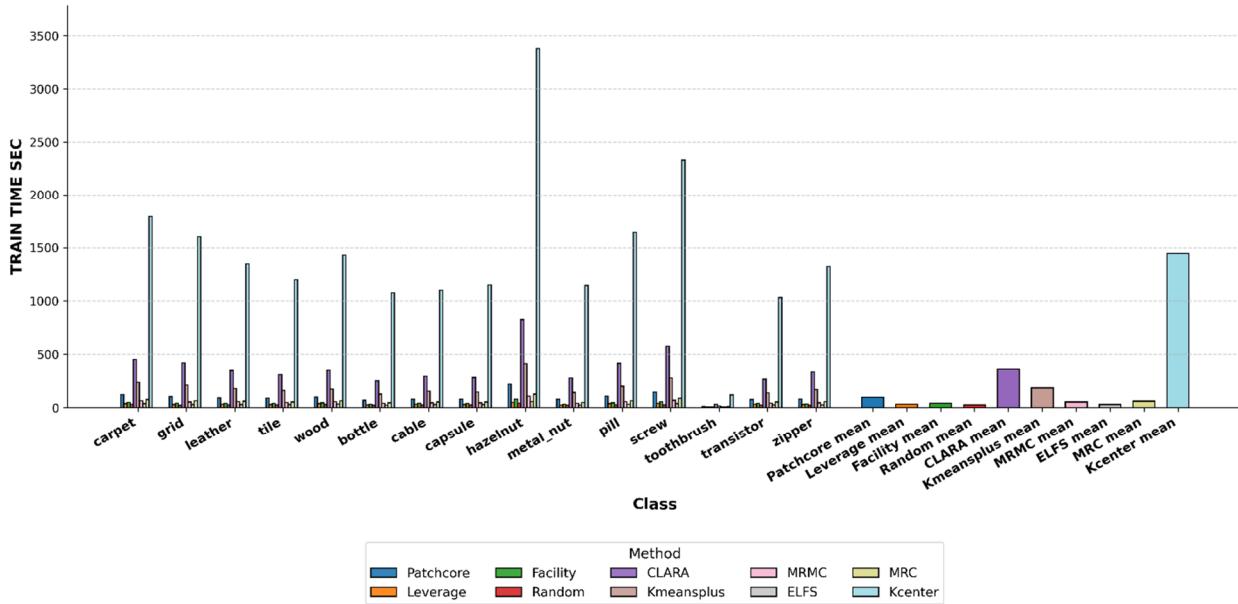
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9876	0.962	0.9879	0.9879	0.9881	0.9879	0.9875	0.9831	0.9873	0.9877
grid	0.9769	0.3829	0.9724	0.9724	0.9723	0.9755	0.9728	0.9372	0.9794	0.9806
leather	0.9897	0.9536	0.9895	0.9895	0.9893	0.9895	0.9898	0.986	0.9896	0.9896
tile	0.9375	0.7848	0.9322	0.9322	0.9341	0.9328	0.9398	0.9314	0.938	0.9383
wood	0.9301	0.8706	0.9286	0.9286	0.9276	0.9303	0.9316	0.9223	0.9321	0.933
bottle	0.9783	0.5912	0.9772	0.9772	0.9772	0.9776	0.9651	0.8994	0.978	0.978
cable	0.9729	0.687	0.9665	0.9665	0.9656	0.9682	0.9549	0.8699	0.9739	0.9736
capsule	0.9868	0.9178	0.9839	0.9839	0.9843	0.9857	0.9366	0.3696	0.987	0.987
hazelnut	0.9773	0.9535	0.9766	0.9766	0.9769	0.9773	0.9571	0.832	0.9777	0.9777
metal_nut	0.9775	0.7761	0.9712	0.9712	0.9719	0.9738	0.9655	0.8053	0.9772	0.9776
pill	0.9731	0.7437	0.9586	0.9586	0.9594	0.9606	0.9574	0.8092	0.9751	0.9758
screw	0.9922	0.9049	0.9782	0.9782	0.981	0.986	0.9709	0.2758	0.9918	0.9924
toothbrush	0.9805	0.872	0.9783	0.9783	0.9808	0.9815	0.9619	0.4854	0.9807	0.9801
transistor	0.9223	0.7232	0.8974	0.8974	0.8966	0.905	0.8366	0.6562	0.9281	0.9267
zipper	0.9851	0.836	0.9833	0.9833	0.9835	0.9833	0.9517	0.4678	0.9845	0.9851
mean	0.971	0.797	0.965	0.965	0.966	0.968	0.952	0.749	0.972	0.972

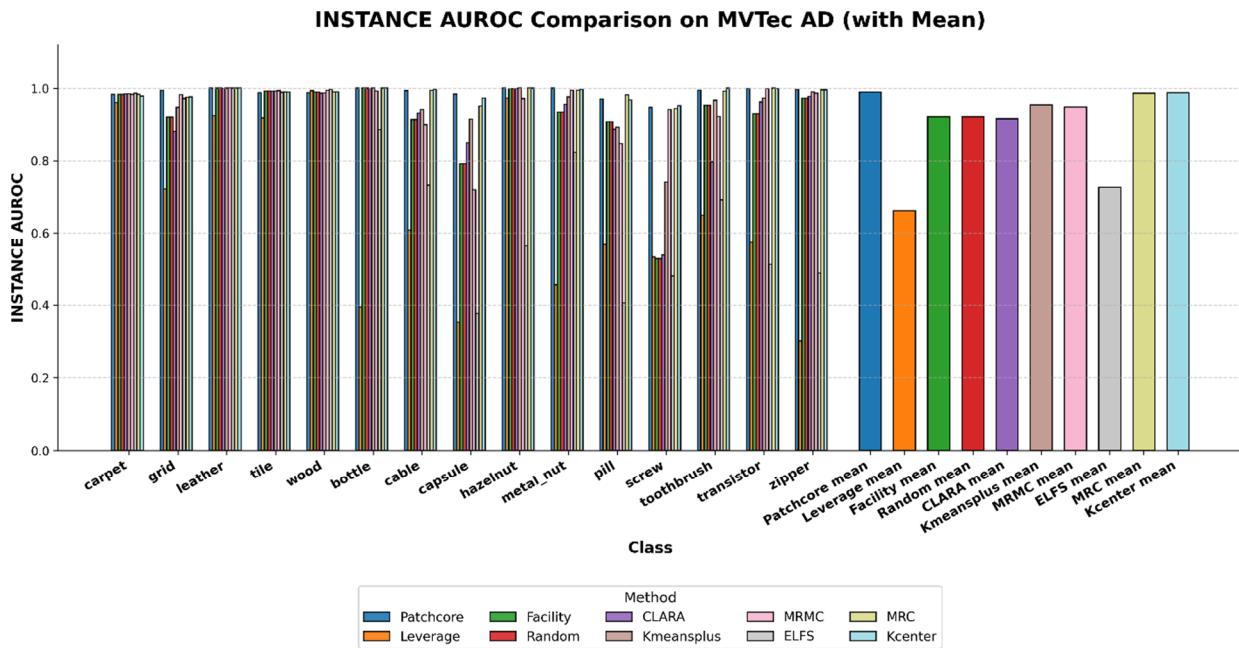
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > Leverage

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	123.9994	36.253	50.8414	31.7952	450.9062	237.8028	65.0561	37.8756	77.6068	1791.243
grid	103.3456	30.0647	41.535	22.4011	420.3497	210.6436	53.2582	29.1968	64.0796	1602.035
leather	92.677	31.7839	40.5211	27.3346	348.9593	180.3612	58.0347	29.6358	60.3603	1347.282
tile	89.0087	30.0477	38.6355	25.6939	309.8033	160.3226	46.6864	28.1164	54.1849	1197.438
wood	101.4327	36.5578	44.5459	28.9429	351.837	174.7349	55.6734	33.4746	64.4756	1429.281
bottle	69.1823	25.6042	31.6021	20.9009	252.1336	128.0741	39.4437	23.6408	45.8652	1074.863
cable	80.4435	30.9112	41.0863	26.1199	292.4968	156.5155	45.3347	28.6002	53.3586	1100.957
capsule	78.68	29.0725	40.279	26.2858	283.1311	148.9612	45.0817	28.8667	54.0795	1150.023
hazelnut	222.3105	51.2535	80.1571	43.5106	824.6619	412.5932	107.1204	57.6332	128.1464	3377.887
metal_nut	78.059	24.95	31.2576	24.5423	276.2842	142.719	38.972	23.5462	48.398	1145.72
pill	107.0788	36.0778	44.2196	26.0431	414.7065	202.0286	54.9941	31.7959	66.5004	1641.525
screw	145.5291	39.1951	56.7617	27.5388	575.6964	278.9255	70.0334	37.5387	86.3785	2327.961
toothbrush	10.8491	8.3079	9.0592	6.6866	31.0319	16.1067	8.7439	7.0421	9.8581	118.0209
transistor	76.6132	30.8594	39.5397	24.6177	267.4377	140.8438	43.4667	27.157	51.8304	1029.931
zipper	80.6355	28.6706	35.027	21.7187	334.7124	168.2917	46.0975	25.6053	54.9692	1321.997
mean	97.323	31.307	41.671	25.609	362.277	183.928	51.866	29.982	61.339	1443.744

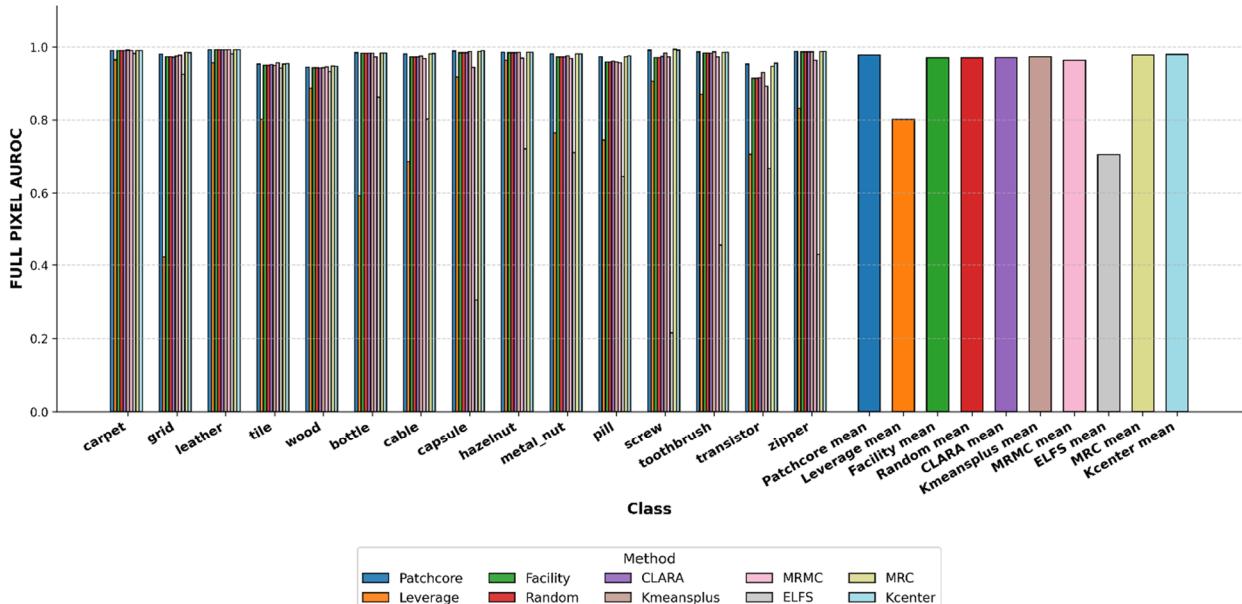
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Top-3 methods by mean INSTANCE AUROC: Patchcore > Kcenter > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9831	0.9607	0.9831	0.9831	0.9843	0.9843	0.9831	0.9864	0.9831	0.9783
grid	0.9942	0.7226	0.9206	0.9206	0.8814	0.9474	0.9825	0.9716	0.9749	0.9758
leather	1	0.9243	1	1	0.9997	1	1	1	1	1
tile	0.9874	0.9181	0.9928	0.9928	0.9913	0.9921	0.9935	0.9885	0.9899	0.9892
wood	0.9877	0.993	0.9895	0.9895	0.986	0.9868	0.9939	0.9965	0.9904	0.9904
bottle	1	0.3944	1	1	0.9984	1	0.9921	0.8857	1	1
cable	0.9934	0.6089	0.913	0.913	0.9314	0.9415	0.899	0.7322	0.994	0.997
capsule	0.984	0.353	0.7922	0.7922	0.8496	0.9146	0.7204	0.3761	0.9513	0.9729
hazelnut	1	0.9732	0.9989	0.9989	0.9993	1	0.9714	0.5625	1	1
metal_nut	1	0.4555	0.9335	0.9335	0.956	0.9756	0.9946	0.8231	0.9946	0.9966
pill	0.9705	0.5666	0.9075	0.9075	0.8865	0.8925	0.8478	0.4056	0.9815	0.967
screw	0.9473	0.5325	0.5274	0.5274	0.5374	0.7411	0.9416	0.4796	0.9436	0.9516
toothbrush	0.9944	0.65	0.9528	0.9528	0.7972	0.9667	0.9222	0.6917	0.9917	1
transistor	0.9992	0.5733	0.93	0.93	0.9617	0.9725	0.9987	0.5117	1	0.9992
zipper	0.9961	0.3015	0.9722	0.9722	0.9777	0.9898	0.9858	0.4877	0.9958	0.9958
mean	0.989	0.662	0.921	0.921	0.916	0.954	0.948	0.727	0.986	0.988

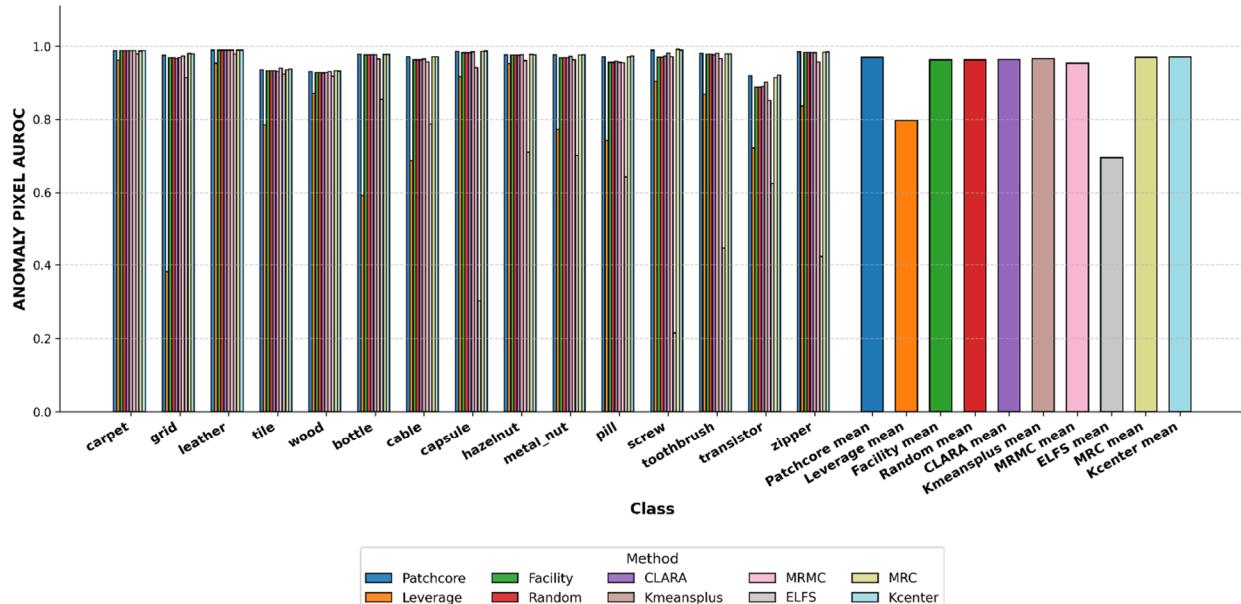
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9901	0.9649	0.9903	0.9903	0.9905	0.9907	0.9901	0.9817	0.9901	0.9903
grid	0.9801	0.423	0.9733	0.9733	0.9719	0.9748	0.9774	0.9251	0.9851	0.9837
leather	0.9923	0.9569	0.9923	0.9923	0.9921	0.992	0.9924	0.9813	0.9924	0.9923
tile	0.9533	0.801	0.9499	0.9499	0.9511	0.949	0.9568	0.9417	0.9527	0.9546
wood	0.9445	0.8869	0.9425	0.9425	0.9422	0.9426	0.945	0.9323	0.9477	0.9469
bottle	0.9837	0.5924	0.9825	0.9825	0.9825	0.9827	0.9725	0.8623	0.9835	0.9836
cable	0.9806	0.6858	0.972	0.972	0.972	0.9748	0.968	0.8022	0.9809	0.9814
capsule	0.9883	0.917	0.984	0.984	0.9842	0.9869	0.9436	0.3046	0.9881	0.9893
hazelnut	0.9855	0.9629	0.9842	0.9842	0.9843	0.985	0.9692	0.7209	0.9857	0.9854
metal_nut	0.9813	0.764	0.9722	0.9722	0.9724	0.9756	0.9687	0.7106	0.9808	0.9813
pill	0.9732	0.7448	0.9582	0.9582	0.9608	0.9582	0.957	0.6449	0.9728	0.9751
screw	0.9908	0.9061	0.9708	0.9708	0.9736	0.9829	0.9726	0.2156	0.9931	0.991
toothbrush	0.986	0.8697	0.9831	0.9831	0.9823	0.9862	0.9722	0.4546	0.9851	0.9852
transistor	0.9527	0.7054	0.9144	0.9144	0.916	0.9307	0.8921	0.6672	0.947	0.9549
zipper	0.9877	0.8319	0.9867	0.9867	0.9864	0.9862	0.9627	0.4291	0.9874	0.9877
mean	0.978	0.801	0.97	0.97	0.971	0.973	0.963	0.705	0.978	0.979

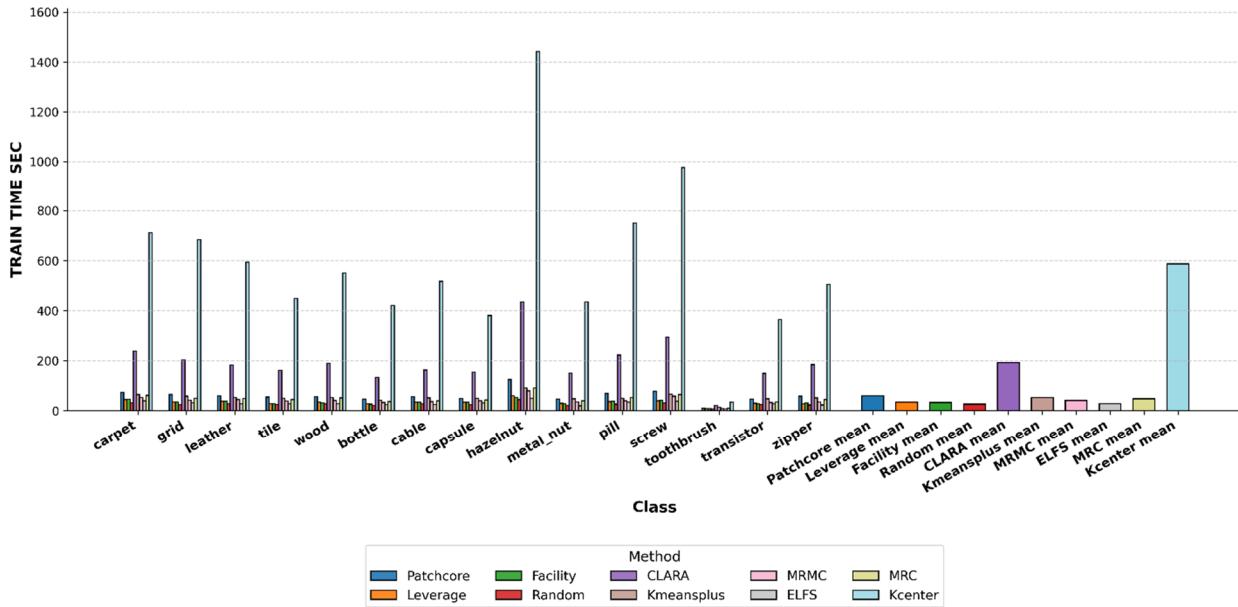
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9874	0.962	0.9877	0.9877	0.9879	0.9881	0.9874	0.9789	0.9873	0.9876
grid	0.9751	0.3815	0.9682	0.9682	0.9667	0.9694	0.9729	0.914	0.98	0.9792
leather	0.9896	0.9538	0.9896	0.9896	0.9894	0.9892	0.9897	0.9785	0.9897	0.9896
tile	0.9361	0.785	0.9326	0.9326	0.9338	0.9315	0.9398	0.9244	0.9353	0.9376
wood	0.9	0.8711	0.9279	0.9279	0.9274	0.9277	0.9301	0.9178	0.9333	0.9321
bottle	0.9781	0.5919	0.9767	0.9767	0.9767	0.9769	0.9653	0.8553	0.9778	0.9779
cable	0.9711	0.6877	0.9626	0.9626	0.9631	0.9652	0.9575	0.7874	0.9715	0.9718
capsule	0.986	0.9175	0.9822	0.9822	0.9821	0.9849	0.9413	0.3016	0.9859	0.9872
hazelnut	0.9771	0.953	0.9758	0.9758	0.9757	0.9767	0.9604	0.71	0.9774	0.9769
metal_nut	0.9768	0.7731	0.9687	0.9687	0.9689	0.9719	0.9628	0.7013	0.9764	0.9768
pill	0.9713	0.7424	0.9563	0.9563	0.9591	0.9562	0.955	0.6424	0.9709	0.9732
screw	0.989	0.9039	0.9701	0.9701	0.9727	0.9812	0.9717	0.2146	0.9914	0.9894
toothbrush	0.9804	0.869	0.9781	0.9781	0.9772	0.9811	0.9658	0.4463	0.9793	0.9794
transistor	0.9198	0.7219	0.8884	0.8884	0.8897	0.9019	0.8517	0.6244	0.9138	0.9214
zipper	0.9845	0.8366	0.9834	0.9834	0.983	0.9826	0.9569	0.4232	0.9841	0.9844
mean	0.97	0.797	0.963	0.963	0.964	0.966	0.954	0.695	0.97	0.971

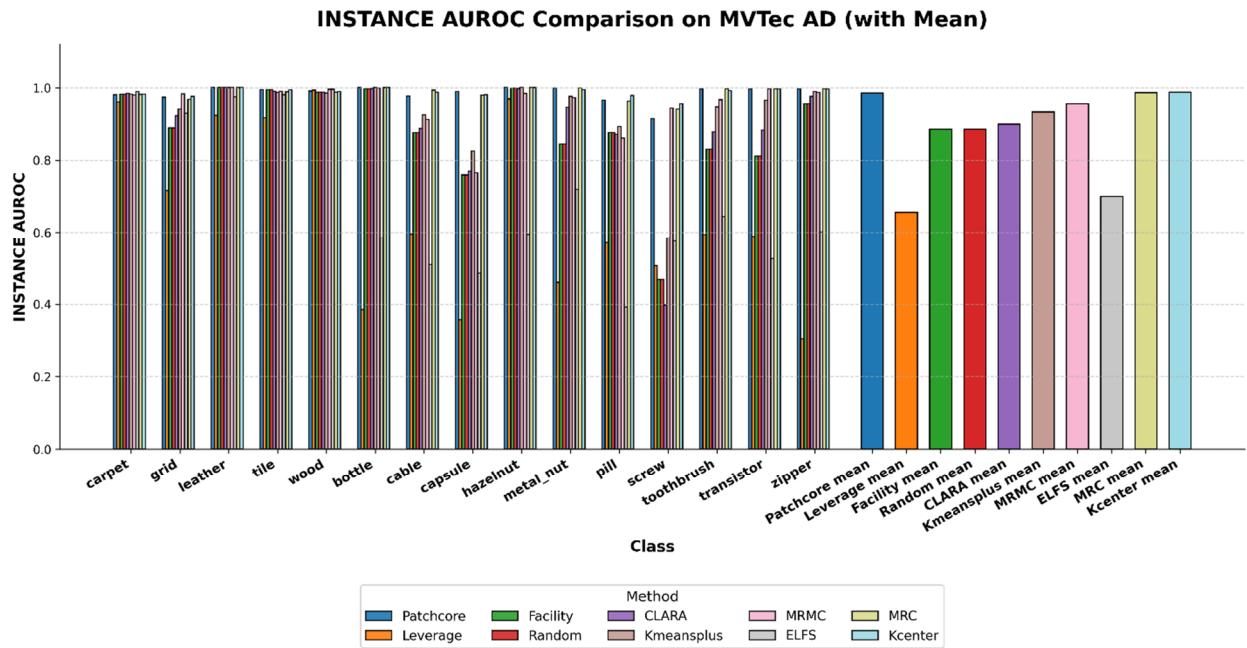
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > Facility

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	72.7927	43.7055	44.7333	32.1245	238.1319	64.3645	53.4712	39.8651	61.1348	711.2867
grid	64.2972	34.7039	34.8759	23.8872	201.7164	57.6228	41.821	31.6933	49.4142	683.2837
leather	59.4263	37.4769	37.2964	26.8959	183.0324	53.4678	44.4391	27.409	48.3829	592.8699
tile	53.9914	28.2967	27.776	24.9419	161.7114	49.6129	38.5175	27.1506	44.1938	448.1692
wood	56.2786	33.6088	30.9046	28.5964	189.868	52.2472	40.7296	28.4143	50.7092	550.1369
bottle	46.4256	26.8721	26.079	20.2957	132.8134	41.7558	32.742	23.5134	35.6287	421.0129
cable	56.7857	34.2712	33.4084	26.6709	162.9012	50.5601	36.6351	24.748	39.5189	516.2518
capsule	48.6119	33.378	33.5425	23.8129	153.826	49.1977	39.5083	30.265	43.3648	379.973
hazelnut	124.1482	60.3456	52.6187	44.0138	434.1049	91.5311	78.6364	49.5455	90.2493	1441.46
metal_nut	45.7883	29.1978	28.336	20.5059	150.4751	47.4838	35.2026	19.4701	39.2875	434.2841
pill	69.2996	36.4601	36.8928	25.9915	222.2109	50.0118	38.9703	33.9994	52.4344	749.9436
screw	77.7933	39.7824	42.098	30.1692	293.5701	65.1863	57.4845	37.3497	64.3431	976.0519
toothbrush	9.1153	7.8332	7.961	6.7808	19.9915	13.0028	7.7043	6.556	9.3087	33.7662
transistor	46.1462	29.127	28.1105	24.9831	148.7381	47.7289	33.1505	27.3466	35.2863	364.8532
zipper	57.7759	27.4048	30.5358	22.0699	183.9883	50.5517	35.4125	22.1571	44.4468	504.8129
mean	59.245	33.498	33.011	25.449	191.805	52.288	40.962	28.632	47.18	587.21

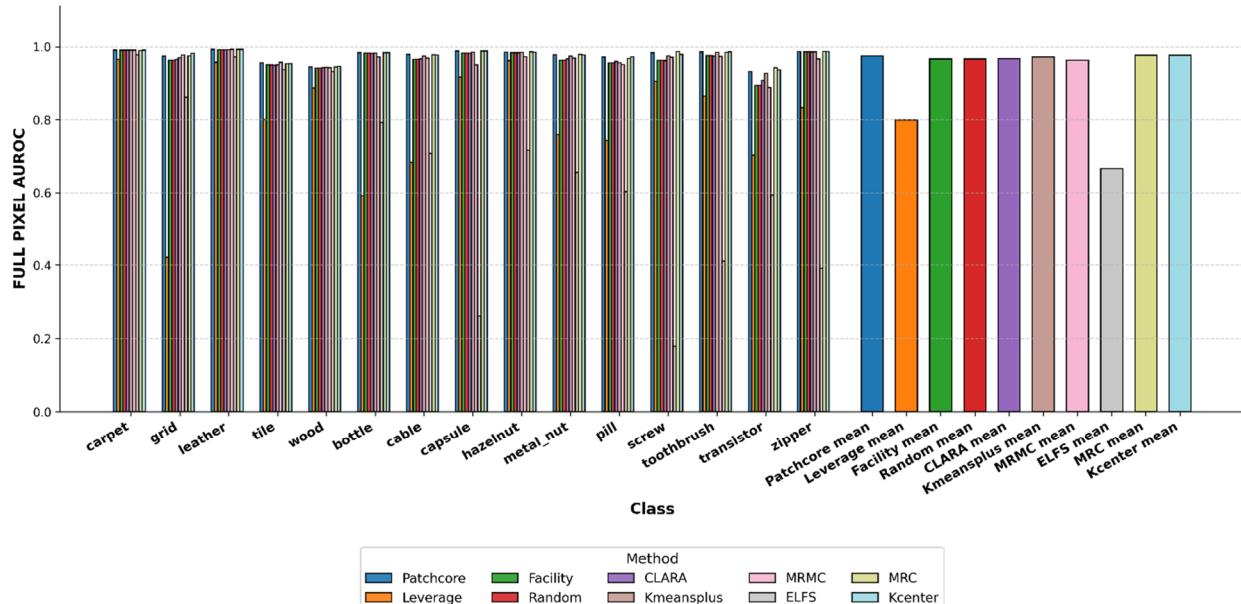
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Top-3 methods by mean INSTANCE AUROC: Kcenter > MRC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9807	0.9603	0.9823	0.9823	0.9843	0.9819	0.9799	0.9892	0.9815	0.9819
grid	0.9733	0.716	0.8889	0.8889	0.9231	0.9407	0.9833	0.9298	0.9683	0.9758
leather	1	0.9232	1	1	1	1	1	0.9742	1	1
tile	0.9949	0.9174	0.9946	0.9946	0.9903	0.9867	0.9899	0.9809	0.9885	0.9939
wood	0.9912	0.993	0.9877	0.9877	0.9877	0.9851	0.9956	0.9956	0.9877	0.9895
bottle	1	0.3849	0.9968	0.9968	0.9976	1	0.9984	0.5841	1	1
cable	0.9771	0.5956	0.8759	0.8759	0.8876	0.925	0.9129	0.5094	0.9929	0.9876
capsule	0.9892	0.3566	0.7591	0.7591	0.7698	0.8253	0.7651	0.4862	0.9789	0.9805
hazelnut	1	0.9693	0.9989	0.9989	0.9982	1	0.9836	0.5946	1	1
metal_nut	0.9985	0.4604	0.8446	0.8446	0.9462	0.9761	0.9721	0.7195	0.9995	0.9946
pill	0.9662	0.5706	0.8764	0.8764	0.871	0.8933	0.8609	0.3923	0.9624	0.9782
screw	0.9147	0.5063	0.4677	0.4677	0.3978	0.5848	0.944	0.5749	0.941	0.9559
toothbrush	0.9972	0.5944	0.8306	0.8306	0.8778	0.9472	0.9667	0.6444	0.9972	0.9917
transistor	0.9962	0.5883	0.8117	0.8117	0.8829	0.9654	0.9975	0.5258	0.9975	0.9962
zipper	0.9974	0.3041	0.9559	0.9559	0.9756	0.989	0.9866	0.6019	0.9968	0.9963
mean	0.985	0.656	0.885	0.885	0.899	0.933	0.956	0.7	0.986	0.988

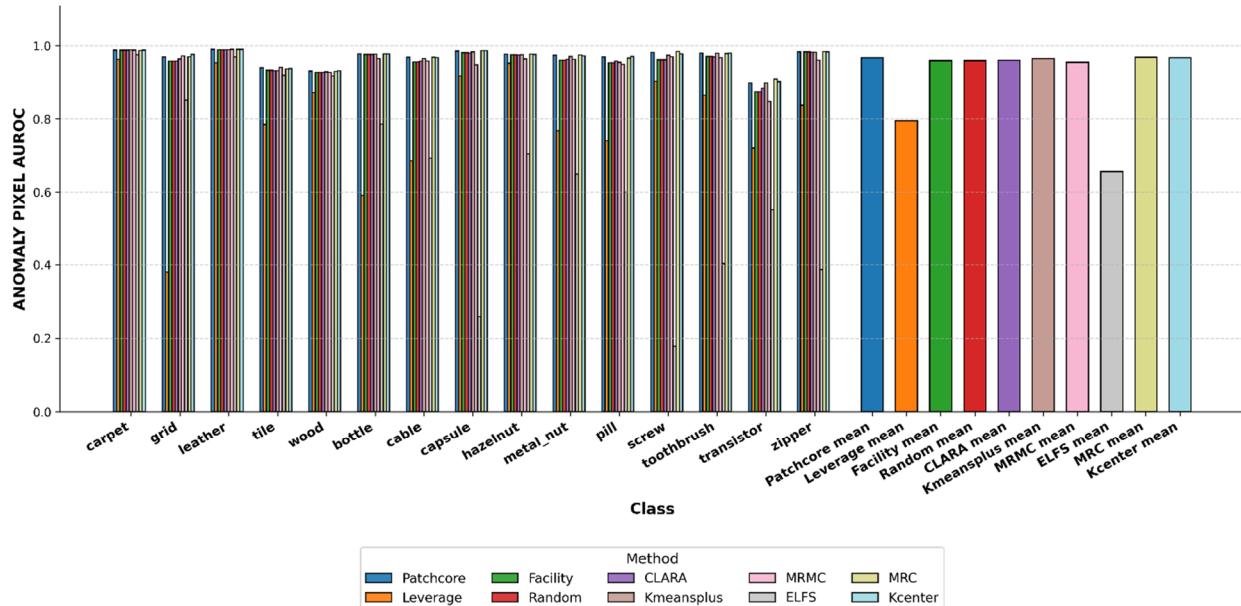
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9901	0.9649	0.9901	0.9901	0.9905	0.9906	0.9901	0.9782	0.9899	0.9901
grid	0.9742	0.4212	0.9631	0.9631	0.9643	0.9691	0.9768	0.8616	0.9746	0.9817
leather	0.9923	0.9569	0.9922	0.9922	0.9922	0.9921	0.9923	0.972	0.9924	0.9923
tile	0.9564	0.8006	0.9498	0.9498	0.9491	0.9496	0.9571	0.9364	0.9532	0.9539
wood	0.9447	0.887	0.9417	0.9417	0.9419	0.9432	0.9424	0.9311	0.9445	0.9458
bottle	0.9833	0.5916	0.9822	0.9822	0.9817	0.9827	0.9717	0.7923	0.9831	0.9835
cable	0.9783	0.6832	0.9651	0.9651	0.9663	0.9739	0.9689	0.7076	0.9777	0.9769
capsule	0.9878	0.9165	0.9823	0.9823	0.9821	0.9852	0.9499	0.2613	0.988	0.988
hazelnut	0.9851	0.9619	0.9836	0.9836	0.9832	0.9838	0.9727	0.7158	0.9854	0.9847
metal_nut	0.9781	0.7588	0.9634	0.9634	0.9665	0.974	0.9688	0.6552	0.9786	0.9768
pill	0.9713	0.743	0.9556	0.9556	0.9596	0.9565	0.9509	0.6024	0.968	0.9724
screw	0.9833	0.905	0.9621	0.9621	0.9616	0.9749	0.9711	0.1789	0.9863	0.979
toothbrush	0.9857	0.8646	0.9756	0.9756	0.9742	0.9844	0.9731	0.411	0.984	0.9853
transistor	0.9318	0.703	0.8941	0.8941	0.9069	0.9269	0.8879	0.5936	0.942	0.9358
zipper	0.9866	0.8329	0.9859	0.9859	0.9856	0.9858	0.9663	0.3914	0.9869	0.9867
mean	0.975	0.799	0.966	0.966	0.967	0.972	0.963	0.666	0.976	0.976

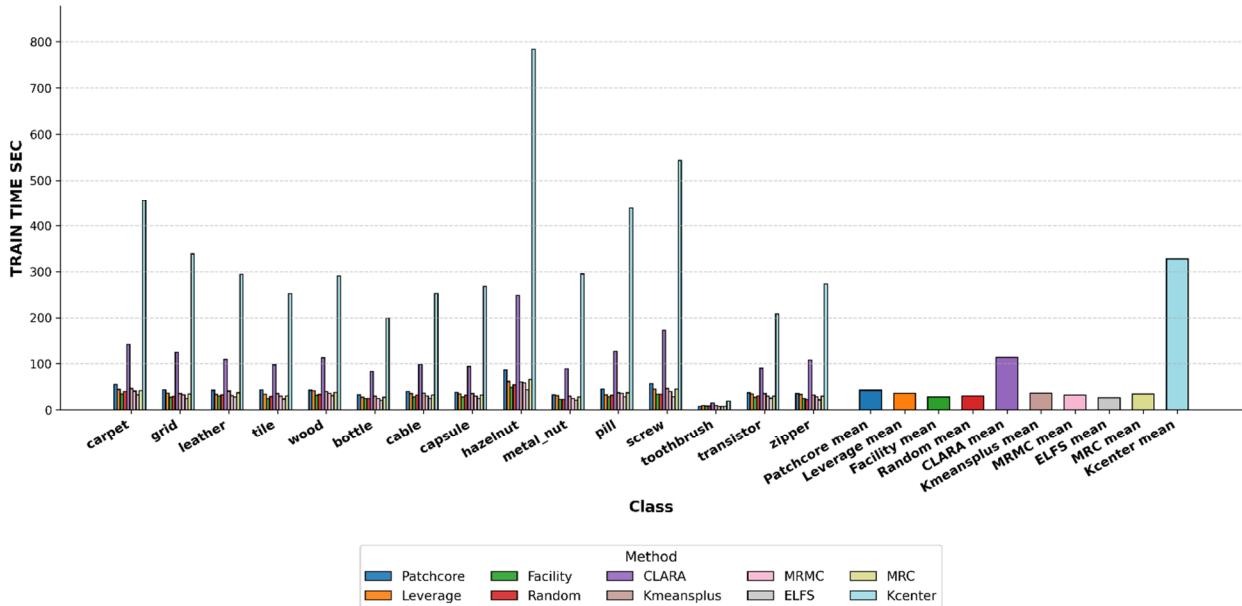
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: MRC > Patchcore > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9874	0.962	0.9875	0.9875	0.9879	0.9881	0.9873	0.9753	0.9872	0.9873
grid	0.9693	0.3797	0.9578	0.9578	0.9582	0.9634	0.9725	0.8515	0.9697	0.9761
leather	0.9896	0.9538	0.9895	0.9895	0.9894	0.9893	0.9897	0.9694	0.9897	0.9896
tile	0.9396	0.7847	0.9323	0.9323	0.9315	0.9321	0.9405	0.9189	0.9362	0.9373
wood	0.9302	0.8712	0.9271	0.9271	0.9272	0.9283	0.9274	0.9172	0.9298	0.9314
bottle	0.9775	0.5911	0.9763	0.9763	0.9757	0.9769	0.9643	0.7852	0.9773	0.9778
cable	0.9686	0.6853	0.9555	0.9555	0.9574	0.9645	0.9585	0.6926	0.9682	0.9672
capsule	0.9856	0.917	0.9806	0.9806	0.9802	0.9832	0.9476	0.259	0.9858	0.9857
hazelnut	0.9765	0.952	0.975	0.975	0.9744	0.975	0.9635	0.7038	0.977	0.9759
metal_nut	0.9736	0.768	0.9602	0.9602	0.9632	0.9704	0.9632	0.6492	0.9742	0.9723
pill	0.9694	0.7408	0.9538	0.9538	0.958	0.9545	0.9489	0.6004	0.9661	0.9704
screw	0.9813	0.9028	0.9615	0.9615	0.9614	0.9734	0.9699	0.1779	0.9846	0.9773
toothbrush	0.9802	0.8641	0.9705	0.9705	0.9691	0.9791	0.9668	0.4029	0.9783	0.9795
transistor	0.8982	0.72	0.8737	0.8737	0.8836	0.8989	0.8474	0.5491	0.9088	0.9014
zipper	0.9832	0.8376	0.9826	0.9826	0.9821	0.9822	0.9609	0.3862	0.9835	0.9832
mean	0.967	0.795	0.959	0.959	0.96	0.964	0.954	0.656	0.968	0.967

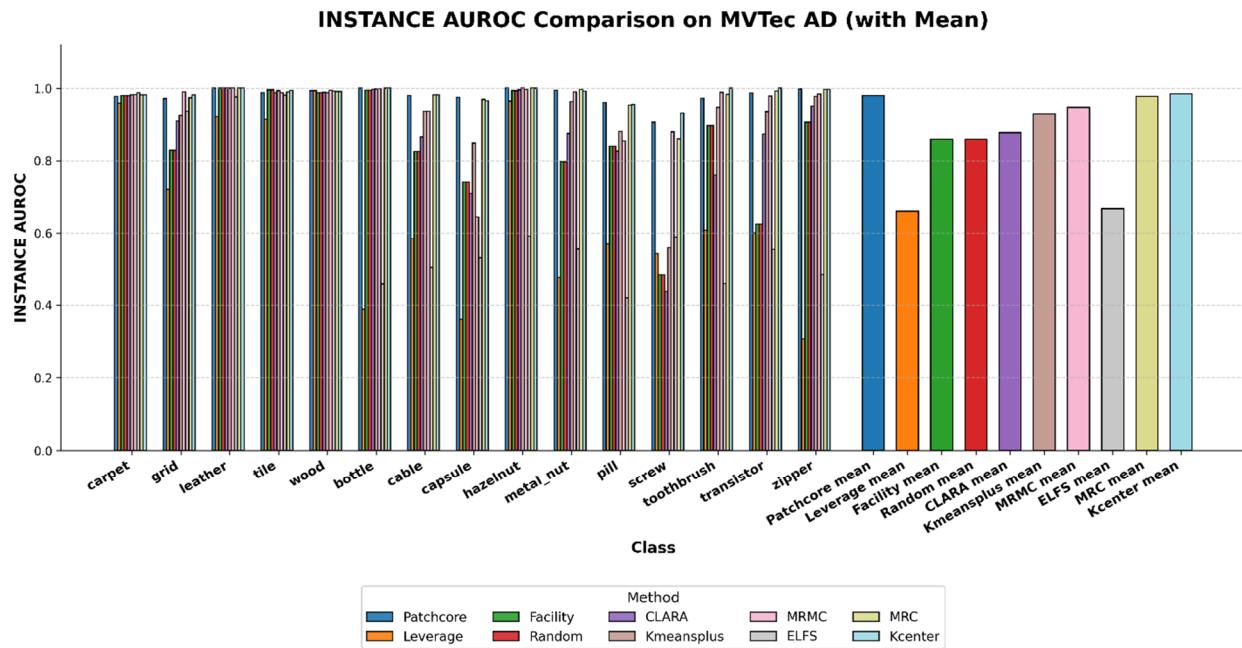
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: ELFS > Facility > Random

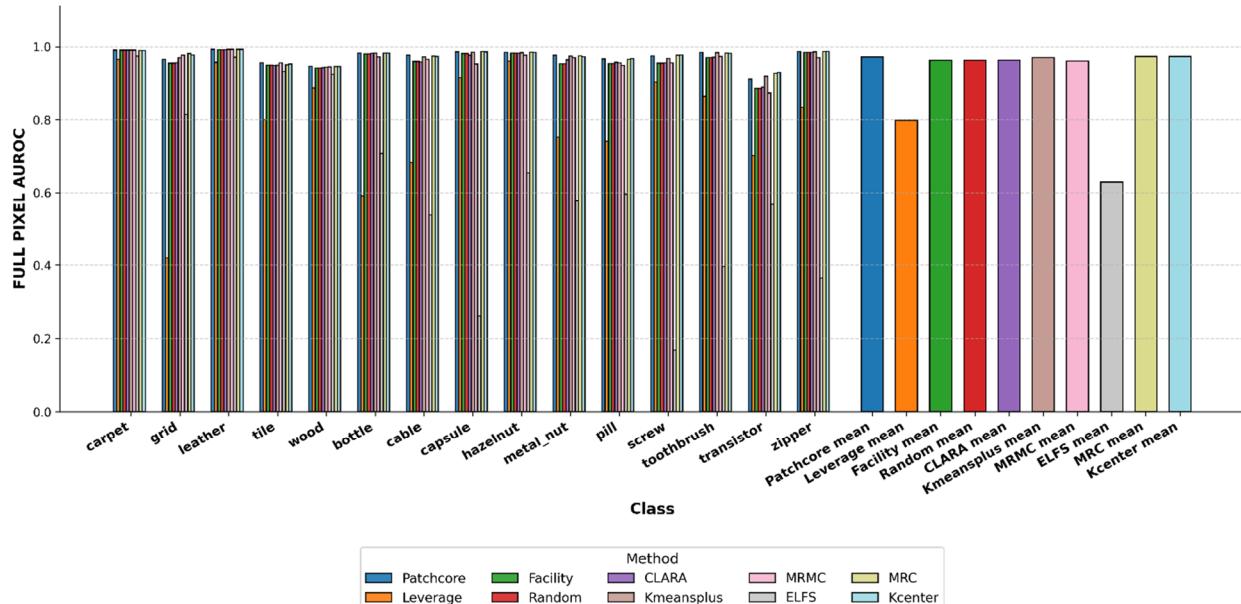
Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	54.9221	44.369	34.5432	40.0897	141.5997	46.046	40.2262	32.299	41.6231	455.0388
grid	43.7736	35.9021	26.6958	28.5684	124.7306	34.6739	32.7747	24.7215	34.28	338.6467
leather	42.4031	33.2506	30.0226	32.4626	108.8891	40.4121	30.9568	27.7754	37.0321	294.4595
tile	43.0075	33.6794	23.8767	28.5246	97.7129	35.0931	29.1654	23.0803	30.2525	251.8278
wood	42.545	40.9794	31.198	32.9158	113.0686	39.777	35.7948	30.6973	37.3255	290.7982
bottle	32.3095	27.1269	24.4905	24.6553	83.0915	29.3731	24.815	20.3369	27.0419	198.5546
cable	39.7103	35.2025	27.3499	31.7362	98.261	36.0731	29.8945	24.6648	32.0475	252.3252
capsule	38.1453	34.552	27.3215	31.1112	93.8123	35.114	29.4424	24.5109	31.915	267.7173
hazelnut	86.4894	61.2888	48.5785	53.9344	248.0406	60.2614	58.4727	43.7269	65.5104	783.4276
metal_nut	32.6742	30.4552	22.5714	21.8065	88.9172	29.6094	24.6422	20.574	27.4919	295.0311
pill	44.6917	32.2842	28.3831	31.309	127.0559	36.6757	35.5171	28.0513	36.8081	438.3558
screw	56.8359	44.4902	33.7505	33.9649	173.2101	45.7691	40.1386	28.3194	44.9394	543.0259
toothbrush	7.6254	9.1605	8.1261	8.2531	14.8406	9.4173	7.1421	6.8877	7.192	19.2783
transistor	36.7551	34.5616	26.6843	30.0132	90.4004	34.7623	29.1355	25.3637	29.547	207.9122
zipper	35.1261	32.9784	24.8035	21.8117	107.7892	31.7305	28.0233	21.7422	29.4318	273.2434
mean	42.468	35.352	27.893	30.077	114.095	36.319	31.743	25.517	34.163	327.309

0.003



Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9775	0.9591	0.9799	0.9799	0.9795	0.9815	0.9819	0.988	0.9815	0.9815
grid	0.9716	0.721	0.8287	0.8287	0.9106	0.9248	0.99	0.9357	0.9733	0.9816
leather	1	0.9219	1	1	1	1	1	0.9759	1	1
tile	0.9877	0.9141	0.9953	0.9953	0.9877	0.9935	0.9874	0.9809	0.9899	0.9942
wood	0.993	0.993	0.9877	0.9877	0.9886	0.9877	0.9947	0.9921	0.9912	0.9912
bottle	1	0.3881	0.9944	0.9944	0.9968	0.9976	0.9984	0.4579	1	1
cable	0.9801	0.584	0.8259	0.8261	0.8653	0.9363	0.9363	0.5034	0.9813	0.9814
capsule	0.9749	0.361	0.7411	0.7411	0.7096	0.8488	0.6446	0.5301	0.9689	0.9649
hazelnut	1	0.9643	0.9929	0.9929	0.9954	1	0.9964	0.5914	1	1
metal_nut	0.9951	0.4756	0.7972	0.7972	0.8749	0.9624	0.9897	0.5543	0.9961	0.9917
pill	0.9602	0.5682	0.8396	0.8396	0.8265	0.8811	0.8549	0.4193	0.9536	0.955
screw	0.9061	0.5415	0.4829	0.4829	0.4372	0.5575	0.8797	0.5883	0.86	0.9315
toothbrush	0.9722	0.6083	0.8972	0.8972	0.7611	0.9472	0.9889	0.4583	0.9833	1
transistor	0.9871	0.6	0.6254	0.6254	0.8738	0.935	0.9787	0.5525	0.9921	1
zipper	0.9979	0.307	0.9065	0.9065	0.9509	0.9772	0.984	0.4837	0.9968	0.9974
mean	0.980227	0.660473	0.859647	0.85966	0.877193	0.928707	0.94704	0.667453	0.977867	0.984693

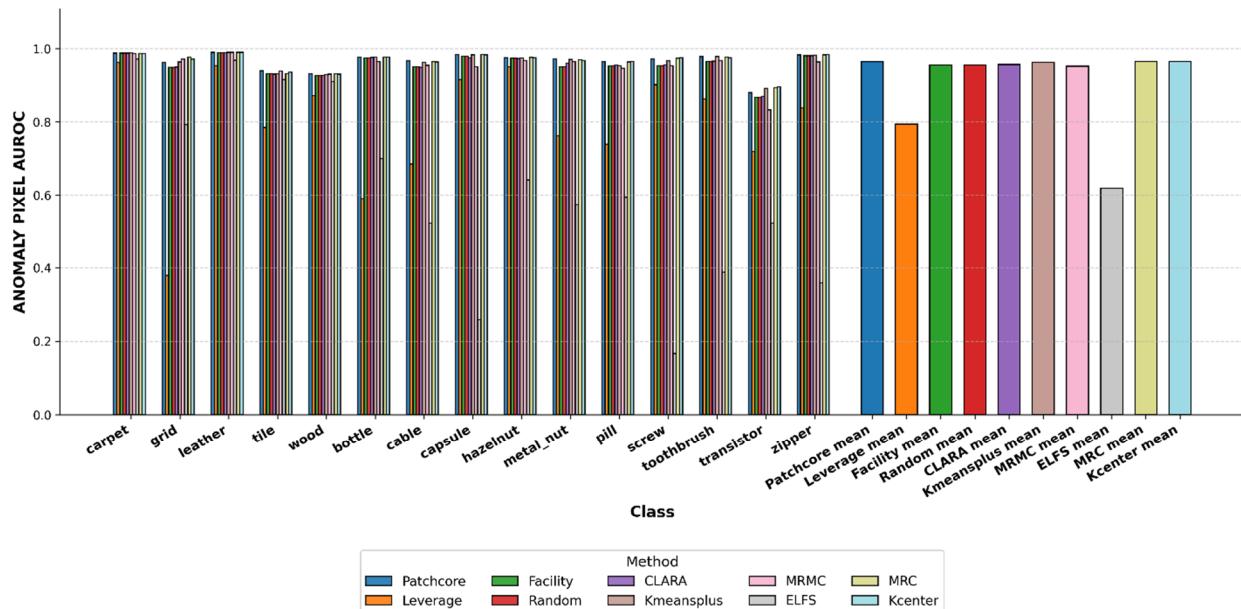
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.99	0.9647	0.99	0.99	0.9903	0.9907	0.99	0.9742	0.9898	0.9896
grid	0.9655	0.4198	0.9546	0.9546	0.9558	0.9691	0.976	0.8141	0.9807	0.9769
leather	0.9924	0.9569	0.9921	0.9921	0.9922	0.9923	0.9923	0.971	0.9924	0.9923
tile	0.9563	0.8002	0.9493	0.9493	0.9484	0.9495	0.9554	0.9322	0.9499	0.9523
wood	0.9459	0.8871	0.9413	0.9413	0.942	0.9436	0.9448	0.924	0.9455	0.9452
bottle	0.9824	0.5907	0.9802	0.9802	0.9817	0.9827	0.972	0.7078	0.9823	0.9829
cable	0.9761	0.6826	0.9593	0.9593	0.9577	0.9718	0.9654	0.5365	0.9743	0.9733
capsule	0.9856	0.9147	0.981	0.981	0.9763	0.9846	0.9524	0.2611	0.9862	0.9854
hazelnut	0.9839	0.9606	0.9823	0.9823	0.9815	0.9831	0.9765	0.6541	0.9847	0.9842
metal_nut	0.9763	0.7525	0.9534	0.9534	0.9639	0.9738	0.9692	0.5761	0.9744	0.9725
pill	0.966	0.7411	0.9542	0.9542	0.9566	0.9556	0.9483	0.5958	0.9656	0.9668
screw	0.9747	0.9037	0.9543	0.9543	0.9557	0.968	0.9556	0.1675	0.976	0.9774
toothbrush	0.9839	0.8635	0.97	0.97	0.9707	0.9831	0.9734	0.3964	0.9822	0.9814
transistor	0.9109	0.7014	0.8855	0.8855	0.8894	0.9192	0.8732	0.5665	0.9264	0.9287
zipper	0.9865	0.8334	0.9839	0.9839	0.9843	0.9857	0.9691	0.364	0.9863	0.9871
mean	0.97176	0.798193	0.962093	0.962093	0.9631	0.970187	0.960907	0.62942	0.973113	0.973067

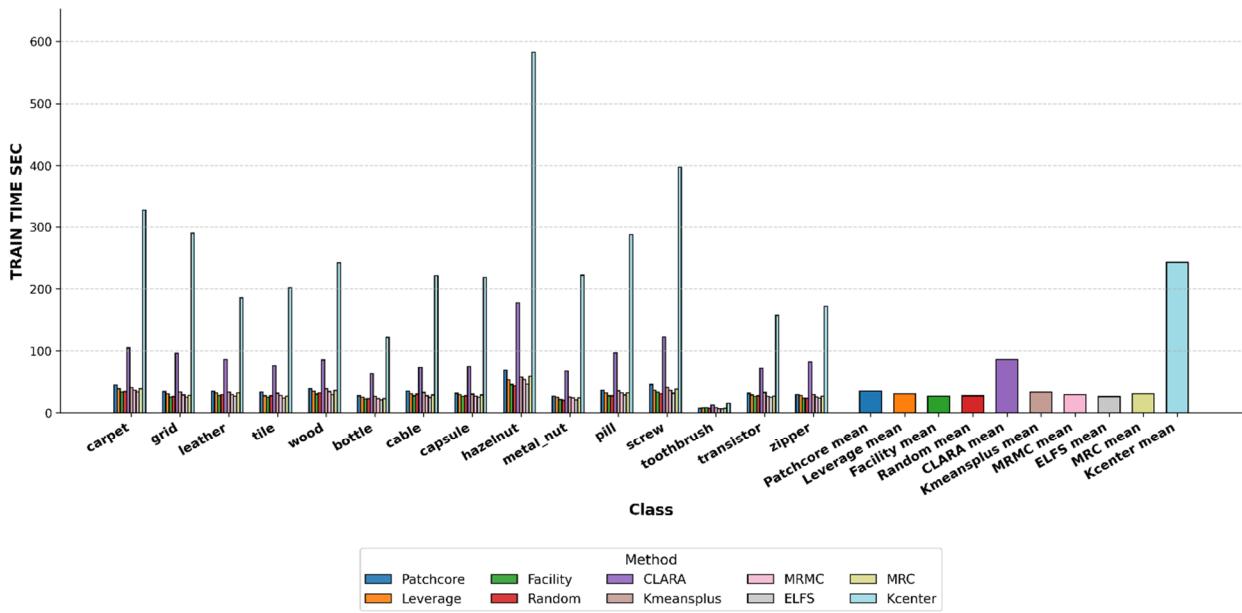
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9873	0.9618	0.9873	0.9873	0.9877	0.9882	0.9871	0.9712	0.987	0.9868
grid	0.9622	0.3786	0.9488	0.9488	0.9498	0.9636	0.9712	0.7926	0.9765	0.9715
leather	0.9897	0.9538	0.9894	0.9894	0.9895	0.9896	0.9896	0.9684	0.9897	0.9896
tile	0.9396	0.7843	0.9317	0.9317	0.9306	0.9321	0.9386	0.9153	0.9322	0.9359
wood	0.9316	0.8712	0.9267	0.9267	0.9274	0.9291	0.9303	0.9104	0.931	0.9306
bottle	0.9764	0.5903	0.9741	0.9741	0.9757	0.9769	0.9646	0.6996	0.9764	0.977
cable	0.9665	0.6851	0.9507	0.9507	0.9492	0.9626	0.9547	0.5216	0.9647	0.9633
capsule	0.9834	0.9153	0.9792	0.9792	0.9746	0.9827	0.9502	0.2589	0.984	0.9831
hazelnut	0.9749	0.9506	0.9736	0.9736	0.9726	0.9743	0.9671	0.641	0.9761	0.9753
metal_nut	0.9721	0.7621	0.9506	0.9506	0.9608	0.9702	0.964	0.5708	0.9699	0.9678
pill	0.9642	0.7389	0.9524	0.9524	0.9548	0.9536	0.9463	0.5939	0.9637	0.9651
screw	0.9723	0.9015	0.9536	0.9536	0.9557	0.967	0.9538	0.1668	0.9737	0.9754
toothbrush	0.9785	0.8631	0.9652	0.9652	0.9656	0.978	0.9671	0.3883	0.9766	0.9753
transistor	0.8796	0.7186	0.8669	0.8669	0.8697	0.8919	0.8327	0.5214	0.8928	0.896
zipper	0.9832	0.8381	0.9805	0.9805	0.9809	0.9821	0.9639	0.3587	0.9829	0.9837
mean	0.9641	0.79422	0.95538	0.95538	0.956307	0.962793	0.95208	0.618593	0.965147	0.965093

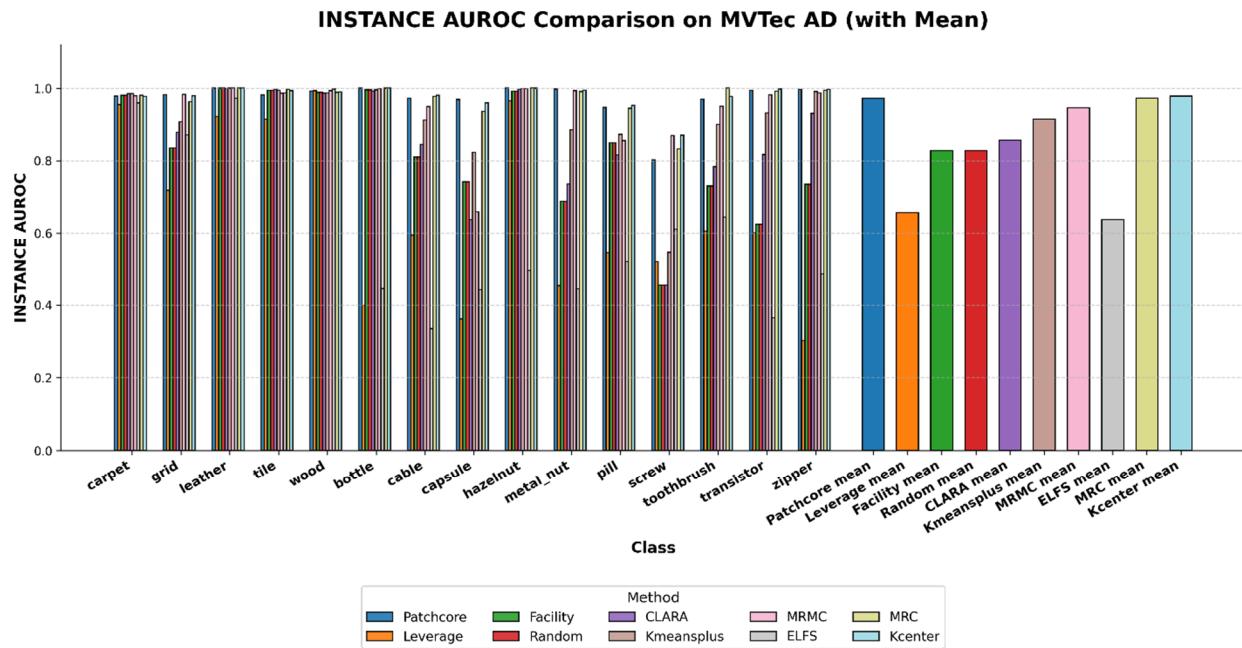
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: ELFS > Facility > Random

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	45.149	38.6124	33.5786	34.2433	104.6027	40.6755	36.3218	33.5663	38.7284	327.1831
grid	34.1575	30.6262	25.5741	25.9116	96.3477	33.7581	28.7249	25.0696	28.0953	289.8303
leather	34.4724	31.9007	27.9369	29.1764	86.247	33.2748	29.4354	26.7366	32.4288	185.3312
tile	33.5711	27.3357	25.1156	27.205	76.3017	31.4762	27.979	23.706	27.0102	201.9804
wood	38.7893	34.4568	30.2064	31.7343	85.2119	38.565	34.0065	29.2214	35.8593	242.2214
bottle	27.4798	25.1705	22.2032	22.7522	63.4909	26.547	22.9485	20.6741	22.9498	121.7508
cable	34.5587	31.06	27.4132	29.9265	73.355	32.7658	27.4922	24.7147	28.724	221.0284
capsule	31.2899	29.8396	26.3236	27.33	74.5798	30.251	27.0909	25.1063	28.5101	218.3015
hazelnut	68.7068	53.1654	45.7669	43.9702	177.1263	57.9812	53.9259	46.248	59.1315	582.2901
metal_nut	26.868	25.2752	21.566	19.8486	67.3856	25.4482	23.965	20.3736	24.2111	221.9418
pill	36.3494	31.7441	27.5331	27.5671	96.5696	35.4681	32.1616	28.5918	32.1454	287.7821
screw	45.6173	36.4268	33.1785	31.2124	122.734	41.0545	35.9855	31.2186	38.0624	397.7278
toothbrush	7.2158	7.6606	8.1914	7.3109	12.7782	8.1994	6.4104	6.3957	7.1473	15.5981
transistor	31.5143	28.6381	26.2275	27.2844	71.9294	32.7101	26.4411	25.0136	27.0873	157.3184
zipper	29.6001	27.6607	23.1085	23.1821	81.9603	29.7141	25.3084	23.9238	26.8261	171.8976
mean	35.02263	30.63819	26.92823	27.24367	86.04134	33.1926	29.21314	26.03734	30.46113	242.8122

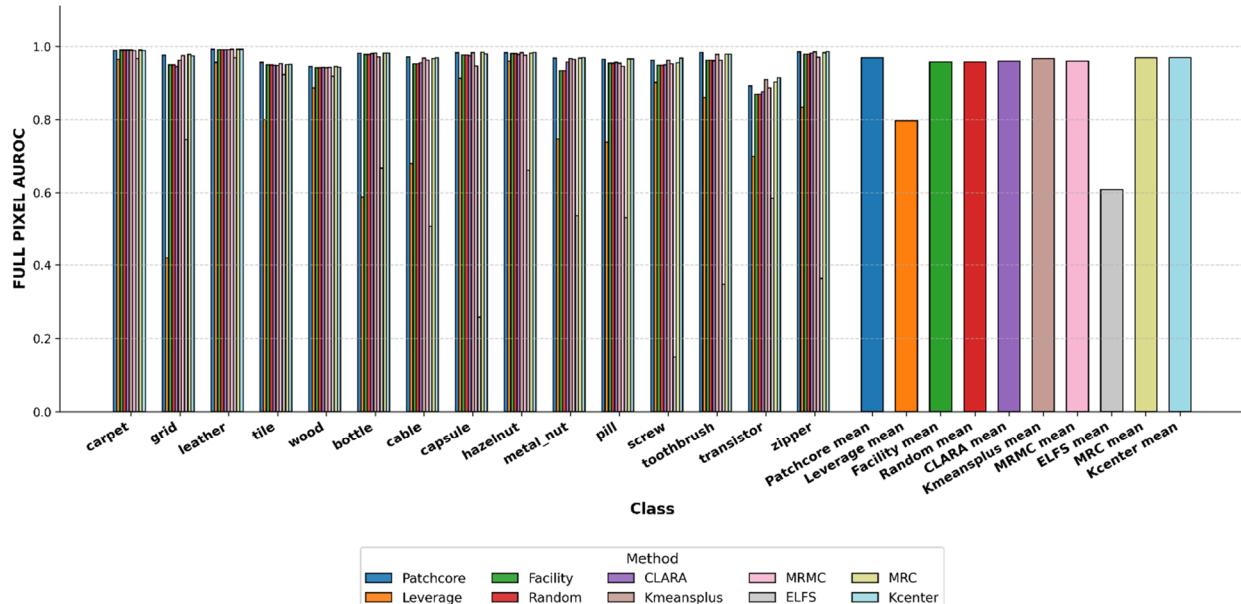
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Top-3 methods by mean INSTANCE AUROC: Kcenter > MRC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9783	0.9547	0.9807	0.9807	0.9856	0.9852	0.9791	0.9595	0.9803	0.9779
grid	0.9825	0.7185	0.8354	0.8354	0.878	0.9081	0.9833	0.8713	0.9624	0.9791
leather	1	0.9219	1	1	0.9997	1	1	0.9718	1	1
tile	0.9812	0.9145	0.9942	0.9942	0.9971	0.9949	0.9863	0.987	0.9968	0.9935
wood	0.9921	0.993	0.9886	0.9886	0.986	0.9868	0.993	0.9982	0.9886	0.9904
bottle	1	0.3992	0.9952	0.9952	0.9921	0.9952	0.9984	0.4452	1	1
cable	0.9717	0.5952	0.8098	0.8098	0.845	0.9123	0.9492	0.3353	0.9773	0.9809
capsule	0.9689	0.3614	0.7423	0.7423	0.6378	0.8237	0.659	0.4424	0.9362	0.9597
hazelnut	1	0.9657	0.9914	0.9914	0.9968	0.9996	0.9989	0.4943	1	1
metal_nut	0.998	0.4531	0.6882	0.6882	0.7356	0.8851	0.9932	0.4443	0.9907	0.9946
pill	0.9471	0.5436	0.8494	0.8494	0.8164	0.8723	0.8552	0.5194	0.9449	0.9525
screw	0.8024	0.5196	0.4546	0.4546	0.455	0.5446	0.8692	0.611	0.8325	0.8707
toothbrush	0.9694	0.6056	0.7306	0.7306	0.7833	0.9	0.95	0.6444	1	0.9778
transistor	0.9942	0.6013	0.6242	0.6242	0.8171	0.9325	0.9812	0.365	0.9917	0.9979
zipper	0.9971	0.302	0.7348	0.7348	0.9304	0.9905	0.9866	0.4853	0.9947	0.9974
mean	0.972	0.657	0.828	0.828	0.857	0.915	0.946	0.638	0.973	0.978

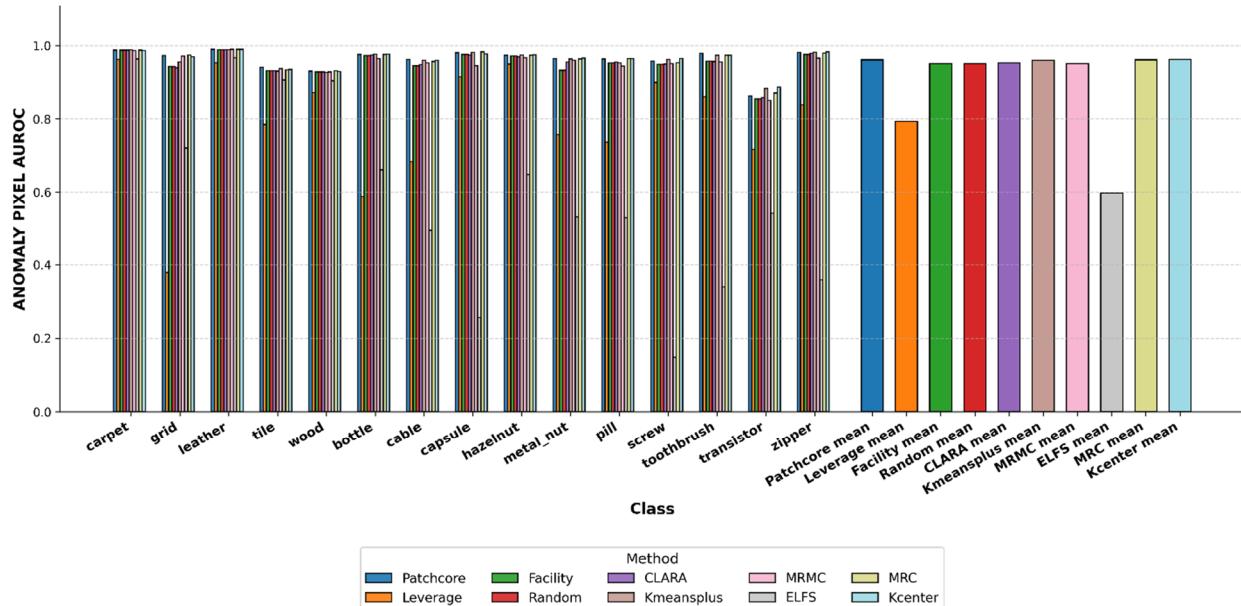
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9898	0.9647	0.9899	0.9899	0.9903	0.9906	0.9894	0.9671	0.99	0.9894
grid	0.9766	0.4195	0.9495	0.9495	0.9453	0.9621	0.9751	0.7459	0.9783	0.9745
leather	0.9922	0.957	0.9921	0.9921	0.9921	0.9921	0.9923	0.9695	0.9923	0.9923
tile	0.9572	0.8003	0.9495	0.9495	0.9494	0.948	0.9537	0.9234	0.9506	0.9513
wood	0.9449	0.887	0.9421	0.9421	0.9426	0.942	0.943	0.9187	0.9452	0.9438
bottle	0.9819	0.588	0.9789	0.9789	0.9806	0.9826	0.9717	0.6675	0.9821	0.9827
cable	0.9713	0.6798	0.9531	0.9531	0.9558	0.9688	0.9631	0.5055	0.9671	0.9694
capsule	0.9831	0.9137	0.9774	0.9774	0.9758	0.9834	0.947	0.2579	0.9847	0.9801
hazelnut	0.9829	0.9596	0.981	0.981	0.9787	0.983	0.9759	0.662	0.9827	0.984
metal_nut	0.9685	0.7472	0.9345	0.9345	0.9575	0.9666	0.9647	0.5343	0.9684	0.9703
pill	0.9654	0.7389	0.9544	0.9544	0.9566	0.9545	0.9461	0.529	0.9661	0.966
screw	0.9619	0.9016	0.9492	0.9492	0.9495	0.9623	0.9531	0.1489	0.9562	0.9681
toothbrush	0.9843	0.8606	0.9621	0.9621	0.9612	0.9789	0.9625	0.3473	0.9796	0.9797
transistor	0.8926	0.6987	0.87	0.87	0.876	0.9093	0.8872	0.5845	0.9034	0.9149
zipper	0.9852	0.8339	0.9795	0.9795	0.9824	0.9856	0.9708	0.3635	0.9833	0.986
mean	0.969	0.797	0.958	0.958	0.96	0.967	0.96	0.608	0.969	0.97

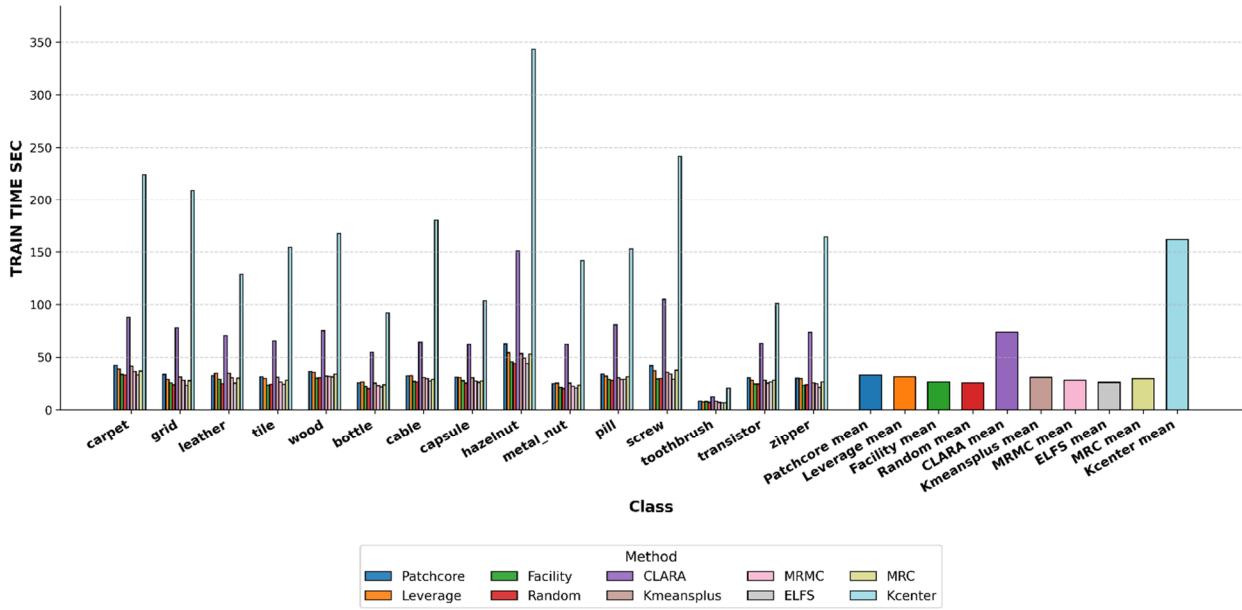
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9872	0.9618	0.9872	0.9872	0.9878	0.988	0.9866	0.9639	0.9874	0.9866
grid	0.9728	0.3787	0.9428	0.9428	0.9395	0.9556	0.9712	0.72	0.9747	0.9694
leather	0.9895	0.9538	0.9894	0.9894	0.9893	0.9894	0.9896	0.9669	0.9896	0.9896
tile	0.9407	0.7844	0.932	0.932	0.9321	0.9303	0.9369	0.9065	0.933	0.9346
wood	0.9304	0.871	0.9275	0.9275	0.9281	0.9273	0.9282	0.9042	0.931	0.9293
bottle	0.9757	0.5877	0.9726	0.9726	0.9745	0.9768	0.9641	0.6604	0.9761	0.9769
cable	0.9617	0.6828	0.9452	0.9452	0.9477	0.9595	0.953	0.493	0.9569	0.9594
capsule	0.9809	0.9144	0.9758	0.9758	0.9742	0.9815	0.9447	0.2562	0.9825	0.9778
hazelnut	0.9737	0.9496	0.9719	0.9719	0.9693	0.9743	0.9665	0.6484	0.9737	0.9752
metal_nut	0.964	0.7568	0.9325	0.9325	0.9549	0.9633	0.9596	0.5296	0.9639	0.9656
pill	0.9636	0.7368	0.9527	0.9527	0.9548	0.9525	0.944	0.5274	0.9644	0.9643
screw	0.9584	0.8993	0.9485	0.9485	0.9498	0.9619	0.951	0.1478	0.9537	0.9653
toothbrush	0.9788	0.8603	0.9574	0.9574	0.9569	0.9738	0.9557	0.339	0.9736	0.9735
transistor	0.8625	0.7163	0.8542	0.8542	0.8584	0.8833	0.8501	0.5401	0.8707	0.887
zipper	0.9816	0.8386	0.9761	0.9761	0.979	0.982	0.9657	0.3588	0.9794	0.9825
mean	0.961	0.793	0.951	0.951	0.953	0.96	0.951	0.597	0.961	0.962

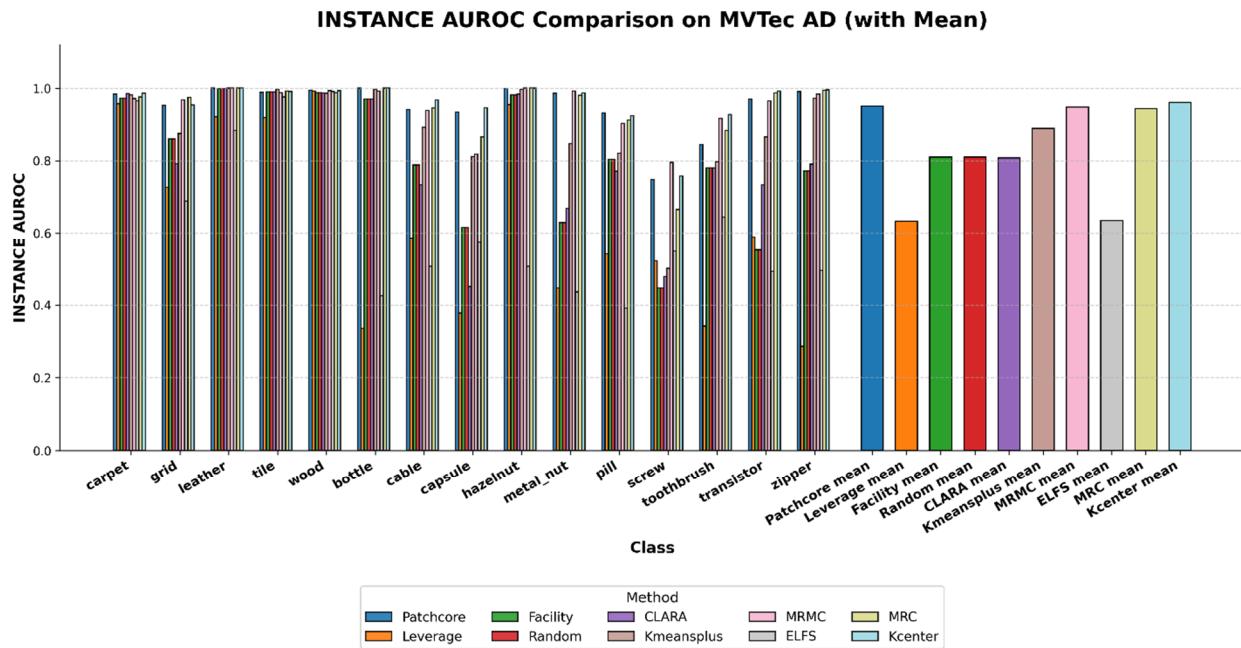
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > Facility

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	42.1227	38.6946	33.6256	33.1299	88.0713	41.7389	36.1169	33.1768	36.7971	224.5102
grid	33.6298	28.6203	25.5688	23.5353	77.9792	31.1194	27.8668	23.1976	27.5523	209.4674
leather	32.4839	34.5287	28.8863	24.791	70.2667	34.5964	30.4555	25.3005	30.1781	128.8867
tile	31.3874	29.8751	23.3568	24.0555	65.4277	30.9143	26.4105	24.1185	28.1962	154.2969
wood	36.3154	35.3215	30.026	30.2245	75.135	32.0318	31.6884	31.2703	33.871	167.4276
bottle	25.6966	26.4633	21.8803	20.148	54.7747	25.1214	22.787	21.8383	23.5441	92.1606
cable	32.0929	32.5905	26.9132	26.3471	64.1611	30.7204	29.5981	27.4706	28.7893	180.4745
capsule	30.811	30.5666	27.542	25.2428	62.2442	30.3818	27.506	26.1721	27.4182	103.6994
hazelnut	62.668	54.1153	45.7054	43.7677	150.7745	53.3139	49.1805	43.8812	52.9139	342.9921
metal_nut	24.9035	25.2889	21.3373	20.144	62.2087	25.1467	22.1773	20.689	23.2435	141.8131
pill	34.0406	32.0523	28.6153	27.8677	80.722	30.2804	28.6834	28.9946	31.3207	152.9407
screw	41.8717	37.0474	29.3475	29.8828	104.9481	35.679	34.1375	28.9532	37.6024	241.7635
toothbrush	8.2347	7.5595	7.693	6.9336	12.4358	8.1337	6.9356	6.7069	6.6934	20.4566
transistor	30.347	27.905	24.4835	24.366	63.0388	28.3162	25.2962	26.6197	28.2275	101.0693
zipper	30.0042	29.6057	23.1703	23.5419	73.6265	25.636	24.6122	21.112	26.6286	164.2651
mean	33.107	31.349	26.543	25.599	73.721	30.875	28.23	25.967	29.532	161.748

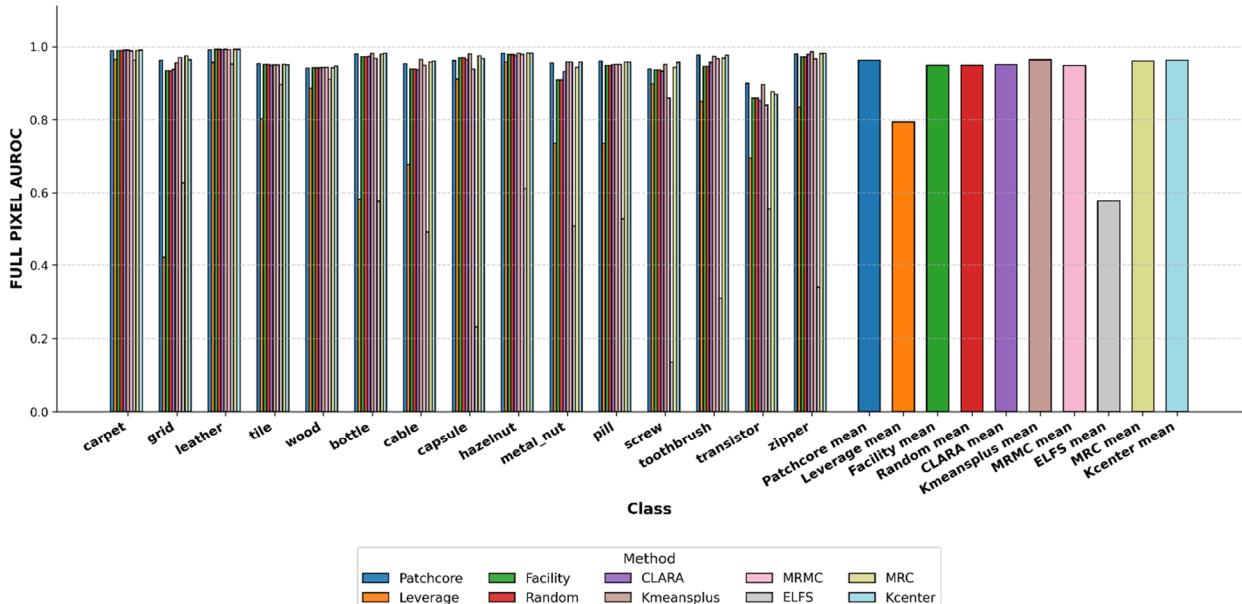
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Top-3 methods by mean INSTANCE AUROC: Kcenter > Patchcore > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9839	0.9575	0.9719	0.9719	0.9852	0.9811	0.9711	0.9651	0.9763	0.986
grid	0.9524	0.726	0.8605	0.8605	0.792	0.8747	0.9683	0.6884	0.9741	0.9541
leather	1.0000	0.9215	0.9997	0.9997	0.9997	1.0000	1.0000	0.8835	1.0000	1.0000
tile	0.9888	0.9185	0.9899	0.9899	0.9903	0.9964	0.9877	0.9758	0.9924	0.9906
wood	0.9947	0.9921	0.9877	0.9877	0.9868	0.986	0.993	0.9912	0.9877	0.993
bottle	1.0000	0.3357	0.9706	0.9706	0.9706	0.9968	0.9921	0.4254	1.0000	1.0000
cable	0.9419	0.5856	0.788	0.788	0.7333	0.8922	0.9383	0.506	0.9457	0.9672
capsule	0.9342	0.3781	0.6163	0.6163	0.4507	0.8113	0.8189	0.5732	0.8656	0.9462
hazelnut	0.9996	0.9546	0.9818	0.9818	0.9836	0.9975	1.0000	0.5061	1.0000	1.0000
metal_nut	0.9858	0.4472	0.6295	0.6295	0.6681	0.848	0.9922	0.436	0.9804	0.9868
pill	0.9318	0.5412	0.8041	0.8041	0.7711	0.8208	0.9034	0.3917	0.9127	0.9242
screw	0.7479	0.5224	0.4468	0.4468	0.478	0.5011	0.7952	0.5483	0.6655	0.7586
toothbrush	0.8444	0.3417	0.7806	0.7806	0.7806	0.7972	0.9167	0.6444	0.8833	0.9278
transistor	0.9708	0.5896	0.5521	0.5521	0.7333	0.8658	0.965	0.4925	0.9867	0.9921
zipper	0.9905	0.2868	0.7718	0.7718	0.7902	0.9722	0.9837	0.4958	0.9945	0.9958
mean	0.951	0.633	0.81	0.81	0.808	0.889	0.948	0.635	0.944	0.961

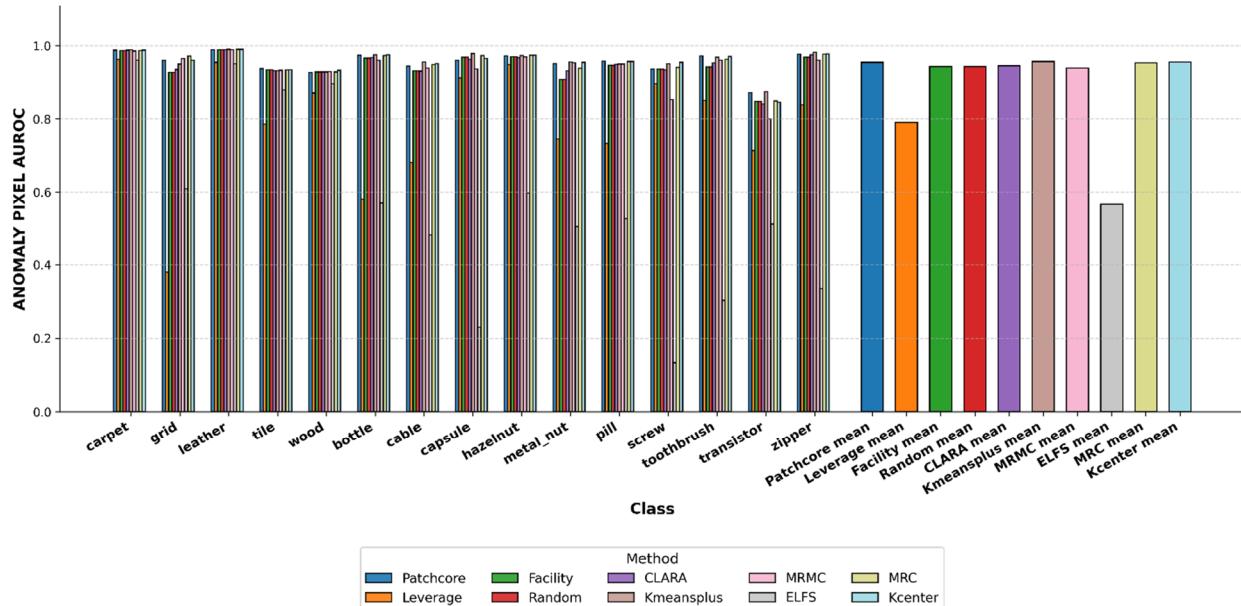
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kmeansplus > Patchcore > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9899	0.9647	0.9895	0.9895	0.9903	0.9906	0.9882	0.9633	0.9895	0.9901
grid	0.9623	0.4207	0.9343	0.9343	0.9377	0.9563	0.9701	0.6269	0.9747	0.9642
leather	0.9921	0.9571	0.9923	0.9923	0.992	0.9923	0.9922	0.9526	0.9924	0.9923
tile	0.954	0.8013	0.9515	0.9515	0.9494	0.9497	0.9501	0.896	0.9511	0.9501
wood	0.9417	0.8865	0.9423	0.9423	0.9425	0.9426	0.9433	0.9105	0.9423	0.9468
bottle	0.9799	0.5813	0.9724	0.9724	0.9732	0.9814	0.9675	0.5737	0.9794	0.9816
cable	0.9533	0.677	0.9393	0.9393	0.9367	0.9643	0.949	0.4903	0.9574	0.96
capsule	0.9615	0.911	0.9694	0.9694	0.9643	0.9801	0.9384	0.2312	0.9749	0.9676
hazelnut	0.9815	0.9578	0.9785	0.9785	0.9758	0.9819	0.9784	0.6111	0.9826	0.9826
metal_nut	0.9557	0.7349	0.909	0.909	0.9319	0.9582	0.9579	0.5067	0.943	0.9587
pill	0.9601	0.7347	0.9484	0.9484	0.9508	0.9515	0.9518	0.5258	0.9579	0.9577
screw	0.9391	0.8982	0.9358	0.9358	0.9332	0.9515	0.859	0.135	0.9428	0.9566
toothbrush	0.9775	0.8503	0.9464	0.9464	0.9571	0.9733	0.9671	0.3093	0.9686	0.9765
transistor	0.8993	0.6953	0.8592	0.8592	0.8532	0.8964	0.8396	0.5528	0.8761	0.8698
zipper	0.9806	0.8345	0.9718	0.9718	0.9786	0.9854	0.9659	0.3391	0.9809	0.9819
mean	0.962	0.794	0.949	0.949	0.951	0.964	0.948	0.575	0.961	0.962

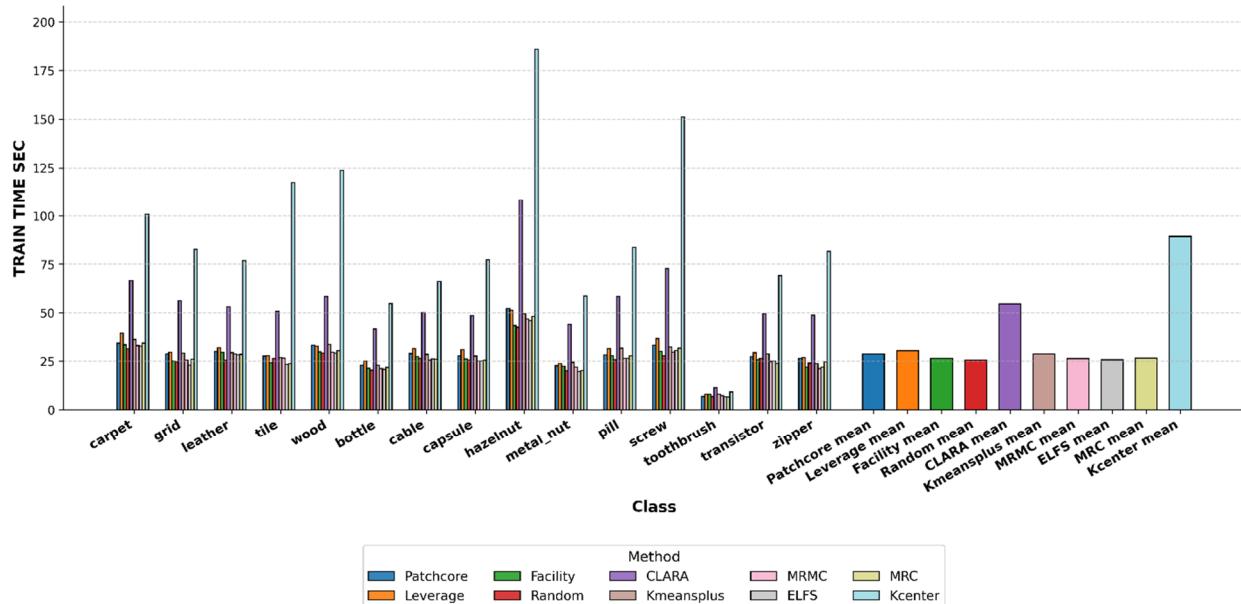
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kmeansplus > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9873	0.9618	0.9868	0.9868	0.9877	0.9881	0.9854	0.9605	0.9868	0.9875
grid	0.9596	0.3798	0.9274	0.9274	0.9349	0.95	0.9646	0.6092	0.9713	0.9595
leather	0.9893	0.954	0.9895	0.9895	0.9892	0.9896	0.9895	0.9508	0.9897	0.9896
tile	0.937	0.7854	0.9342	0.9342	0.932	0.9322	0.9327	0.8795	0.9333	0.9338
wood	0.9268	0.8705	0.9278	0.9278	0.9279	0.9281	0.9287	0.8964	0.9277	0.9327
bottle	0.9736	0.5811	0.9657	0.9657	0.9671	0.9754	0.9599	0.5677	0.9731	0.9756
cable	0.944	0.6805	0.931	0.931	0.9301	0.9558	0.9392	0.4811	0.9484	0.9509
capsule	0.9594	0.9117	0.9681	0.9681	0.9631	0.9783	0.9364	0.2299	0.9728	0.9654
hazelnut	0.9722	0.9478	0.9695	0.9695	0.9664	0.9729	0.9691	0.5972	0.9737	0.9734
metal_nut	0.9511	0.7449	0.9082	0.9082	0.9308	0.9553	0.9532	0.5036	0.938	0.9545
pill	0.9583	0.7327	0.9469	0.9469	0.9491	0.9495	0.95	0.5248	0.9563	0.9563
screw	0.9367	0.8962	0.9354	0.9354	0.9335	0.9508	0.8532	0.1334	0.9405	0.9547
toothbrush	0.9721	0.8502	0.9417	0.9417	0.9526	0.9684	0.9608	0.3027	0.9628	0.9708
transistor	0.8718	0.7136	0.8475	0.8475	0.8402	0.8742	0.8004	0.5107	0.8488	0.8454
zipper	0.9767	0.8392	0.9684	0.9684	0.9752	0.982	0.9606	0.3347	0.977	0.9779
mean	0.954	0.79	0.943	0.943	0.945	0.957	0.939	0.565	0.953	0.955

TRAIN TIME SEC Comparison on MVTec AD (with Mean)



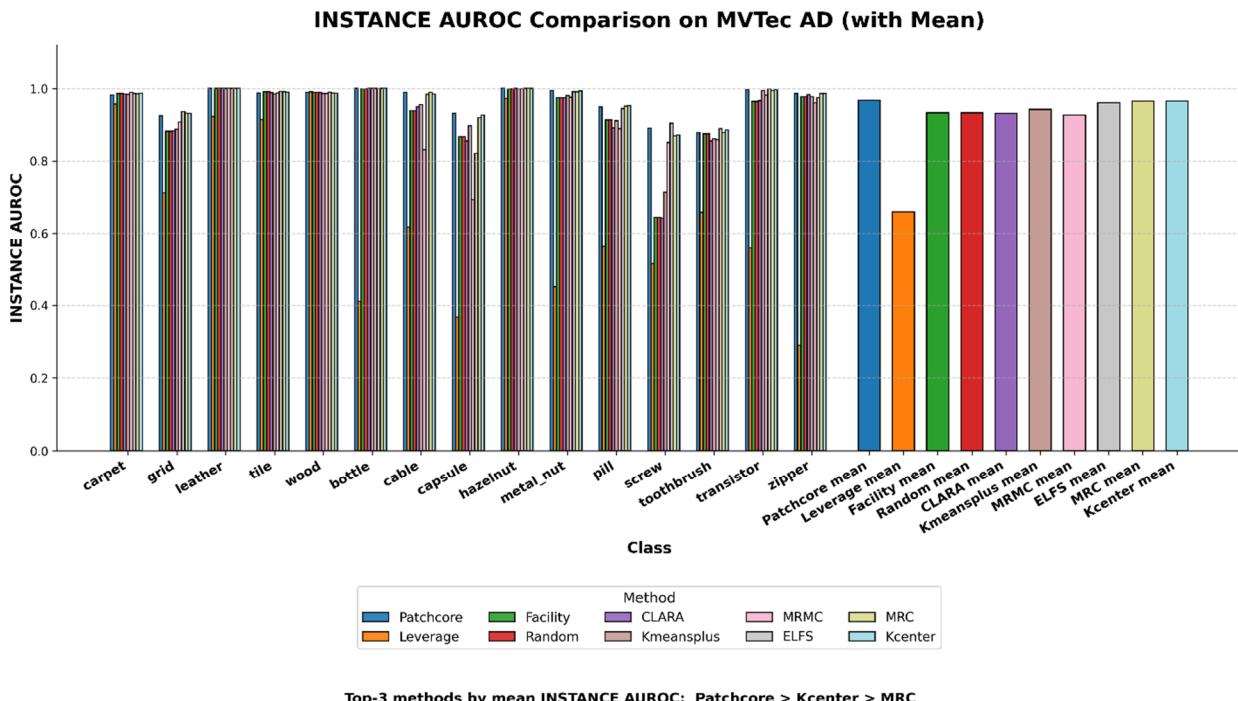
Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	34.3711	39.4868	33.4531	31.4172	66.491	36.2167	33.0314	32.6726	34.2861	100.8698
grid	28.7305	29.4694	25.0692	24.7819	56.1883	29.1552	25.6142	23.0002	26.1008	82.6897
leather	30.0172	32.0127	29.5323	25.4544	53.0402	29.3831	28.7578	28.322	28.5025	76.7442
tile	27.6256	27.8954	24.1554	26.5082	50.5873	26.91	26.5857	23.3826	23.7482	117.4655
wood	33.2748	32.6862	29.7829	29.2851	58.362	33.5969	29.6734	29.0503	30.4463	123.8072
bottle	22.9326	25.0767	21.4227	20.3638	41.6694	23.0276	21.2199	20.8602	21.7942	54.6583
cable	28.9589	31.6182	27.3507	26.4693	50.0072	28.5372	25.493	26.242	25.9943	66.0915
capsule	27.8406	31.0119	26.1309	25.6022	48.4198	27.69	25.171	25.2154	25.526	77.314
hazelnut	52.2683	51.3016	43.2999	42.5192	108.4411	49.3973	46.7724	46.007	48.1828	185.8561
metal_nut	22.6214	23.6749	22.4042	20.1071	43.8667	24.3783	22.0197	19.8331	20.1818	58.6688
pill	28.2339	31.5833	27.8775	25.7235	58.3131	31.7137	26.4919	26.429	27.7333	83.7123
screw	33.3205	36.6897	30.0966	27.9072	72.6714	32.4075	29.7114	30.6034	31.7707	151.1922
toothbrush	6.8745	8.0434	7.9797	6.8189	11.3665	8.0313	7.3008	6.6824	6.5286	9.1844
transistor	27.4171	29.378	25.7683	26.4567	49.5031	28.7896	24.8884	24.963	23.9078	69.0515
zipper	26.4361	26.9543	21.9876	24.0123	48.6899	23.7068	21.2188	21.9348	24.7939	81.6338
mean	28.728	30.459	26.421	25.562	54.508	28.863	26.263	25.68	26.633	89.263

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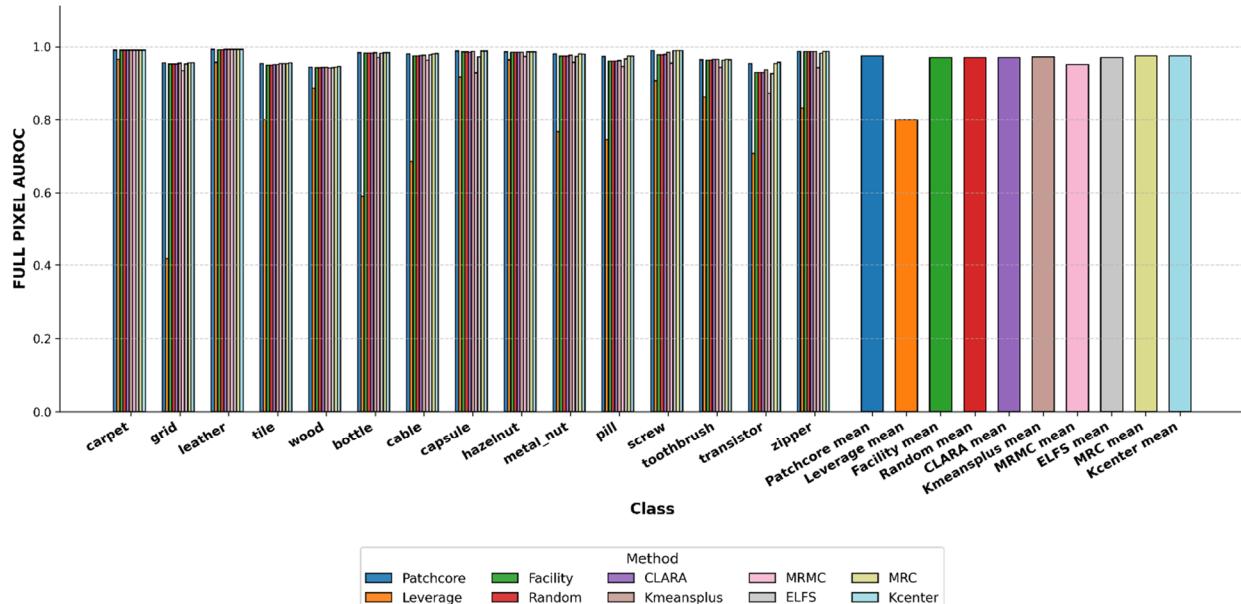
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Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9823	0.9575	0.9864	0.9864	0.9848	0.9835	0.9896	0.986	0.9856	0.9868
grid	0.9248	0.7126	0.8822	0.8822	0.883	0.8872	0.9081	0.9357	0.9323	0.9315
leather	1	0.9229	1	1	1	1	1	1	1	1
tile	0.9881	0.9141	0.9906	0.9906	0.9888	0.9845	0.9874	0.9913	0.991	0.9899
wood	0.9895	0.9912	0.9895	0.9895	0.9886	0.986	0.986	0.9904	0.9877	0.9868
bottle	1	0.4111	0.9984	0.9984	1	1	1	0.9992	1	1
cable	0.9895	0.6175	0.9385	0.9385	0.9492	0.9558	0.8313	0.9837	0.9893	0.9843
capsule	0.9322	0.3678	0.8672	0.8672	0.8556	0.8967	0.6937	0.8213	0.9194	0.9266
hazelnut	1	0.9729	0.9996	0.9996	1	0.9996	0.9986	1	1	1
metal_nut	0.9946	0.4506	0.9741	0.9741	0.9746	0.9804	0.9756	0.9907	0.9907	0.9932
pill	0.949	0.5622	0.9135	0.9135	0.8917	0.9113	0.8893	0.9446	0.9514	0.9523
screw	0.8906	0.5151	0.6438	0.6438	0.6428	0.7141	0.8504	0.9043	0.8692	0.8717
toothbrush	0.8778	0.6583	0.875	0.875	0.8556	0.8611	0.8583	0.8889	0.8778	0.8861
transistor	0.9975	0.5579	0.9646	0.9646	0.9667	0.995	0.9817	0.9987	0.9946	0.9975
zipper	0.9858	0.2899	0.9772	0.9772	0.9827	0.9779	0.9601	0.9745	0.9861	0.9863
mean	0.967	0.66	0.933	0.933	0.931	0.942	0.927	0.961	0.965	0.966

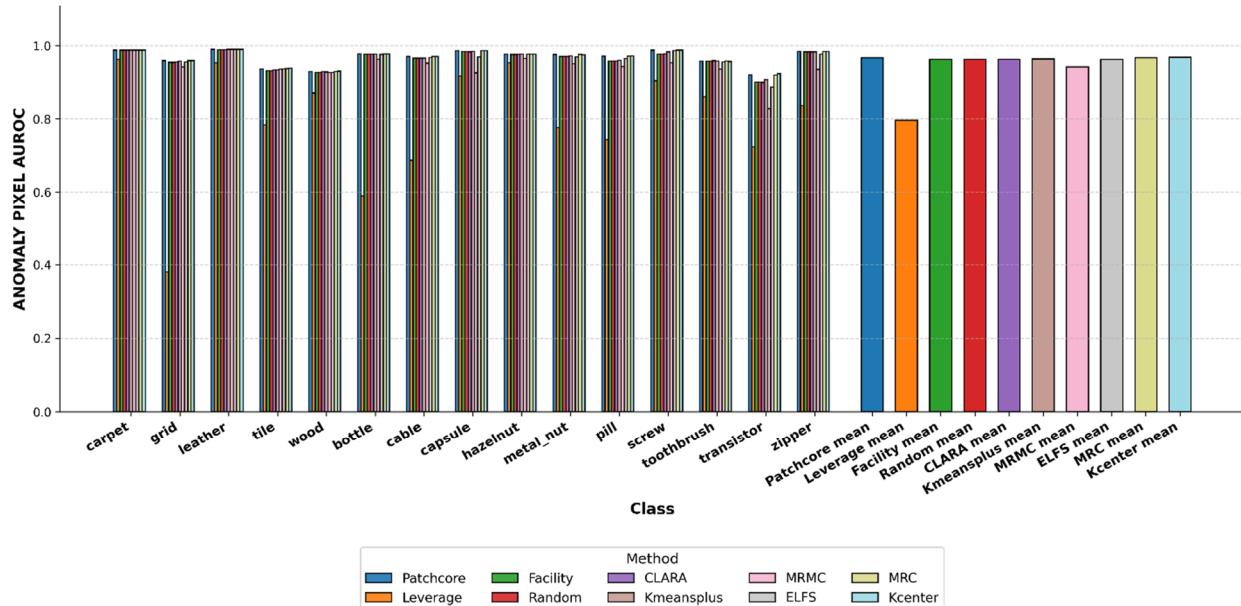
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Patchcore > MRC > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9906	0.9647	0.9905	0.9905	0.9906	0.9906	0.9906	0.9906	0.9906	0.9907
grid	0.9552	0.4181	0.9519	0.9519	0.9524	0.9549	0.9343	0.9525	0.9556	0.9565
leather	0.9924	0.9567	0.9922	0.9922	0.9923	0.9923	0.9924	0.9923	0.9924	0.9924
tile	0.9536	0.8003	0.9493	0.9493	0.9504	0.9508	0.9535	0.9538	0.954	0.9551
wood	0.9439	0.8865	0.9419	0.9419	0.9433	0.943	0.9416	0.9421	0.9441	0.945
bottle	0.9832	0.5905	0.9826	0.9826	0.9827	0.983	0.9704	0.9817	0.9831	0.9833
cable	0.9805	0.6856	0.975	0.975	0.9755	0.976	0.963	0.9776	0.9804	0.9807
capsule	0.9881	0.9169	0.9855	0.9855	0.9849	0.9871	0.9282	0.9716	0.9881	0.988
hazelnut	0.9853	0.9639	0.9847	0.9847	0.9848	0.9852	0.9732	0.9853	0.9854	0.9854
metal_nut	0.9805	0.7672	0.9741	0.9741	0.9741	0.9762	0.9567	0.9735	0.9803	0.9797
pill	0.9731	0.7458	0.9601	0.9601	0.9605	0.9619	0.9449	0.9664	0.9737	0.9742
screw	0.9896	0.9061	0.9782	0.9782	0.9788	0.9845	0.9546	0.9889	0.9894	0.9897
toothbrush	0.9641	0.8618	0.9633	0.9633	0.9654	0.9649	0.9429	0.963	0.9647	0.9638
transistor	0.9536	0.7077	0.9286	0.9286	0.9288	0.9369	0.8724	0.9261	0.9537	0.9569
zipper	0.9875	0.8315	0.9863	0.9863	0.9865	0.9867	0.9422	0.9814	0.9872	0.9874
mean	0.975	0.8	0.97	0.97	0.97	0.972	0.951	0.97	0.975	0.975

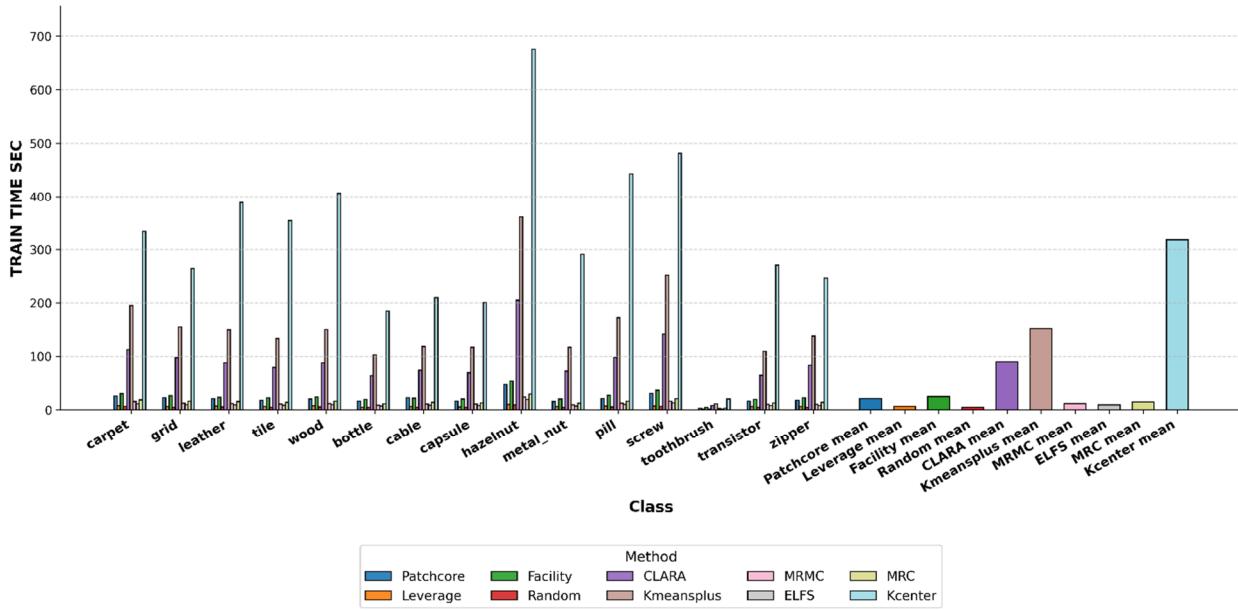
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.988	0.9619	0.9879	0.9879	0.9881	0.988	0.988	0.988	0.988	0.9881
grid	0.9589	0.3803	0.9547	0.9547	0.9553	0.9575	0.9419	0.9562	0.9587	0.9593
leather	0.9897	0.9536	0.9895	0.9895	0.9896	0.9897	0.9898	0.9897	0.9897	0.9897
tile	0.9364	0.7843	0.9319	0.9319	0.9332	0.9336	0.9362	0.9366	0.937	0.9381
wood	0.929	0.8705	0.9271	0.9271	0.9286	0.9281	0.9268	0.9272	0.9293	0.9301
bottle	0.9774	0.5899	0.9768	0.9768	0.9769	0.9772	0.9633	0.9759	0.9773	0.9775
cable	0.9709	0.6874	0.9659	0.9659	0.9659	0.9663	0.9522	0.9677	0.9709	0.9709
capsule	0.9859	0.9174	0.9835	0.9835	0.9829	0.9849	0.9258	0.9693	0.9859	0.9858
hazelnut	0.9771	0.9539	0.9762	0.9762	0.9765	0.9769	0.9649	0.9771	0.9772	0.9771
metal_nut	0.9763	0.7762	0.9704	0.9704	0.9703	0.9724	0.9506	0.9688	0.9762	0.9755
pill	0.9711	0.7435	0.9582	0.9582	0.9586	0.9601	0.9429	0.9645	0.9718	0.9722
screw	0.9877	0.9039	0.9768	0.9768	0.9774	0.9829	0.9535	0.987	0.9876	0.9878
toothbrush	0.9573	0.8609	0.9572	0.9572	0.9592	0.9585	0.9355	0.9561	0.958	0.9569
transistor	0.9201	0.7237	0.9004	0.9004	0.8997	0.9068	0.8284	0.8874	0.9197	0.9231
zipper	0.9843	0.8362	0.9829	0.9829	0.983	0.9833	0.9354	0.9771	0.9839	0.9841
mean	0.967	0.796	0.963	0.963	0.963	0.964	0.942	0.962	0.967	0.968

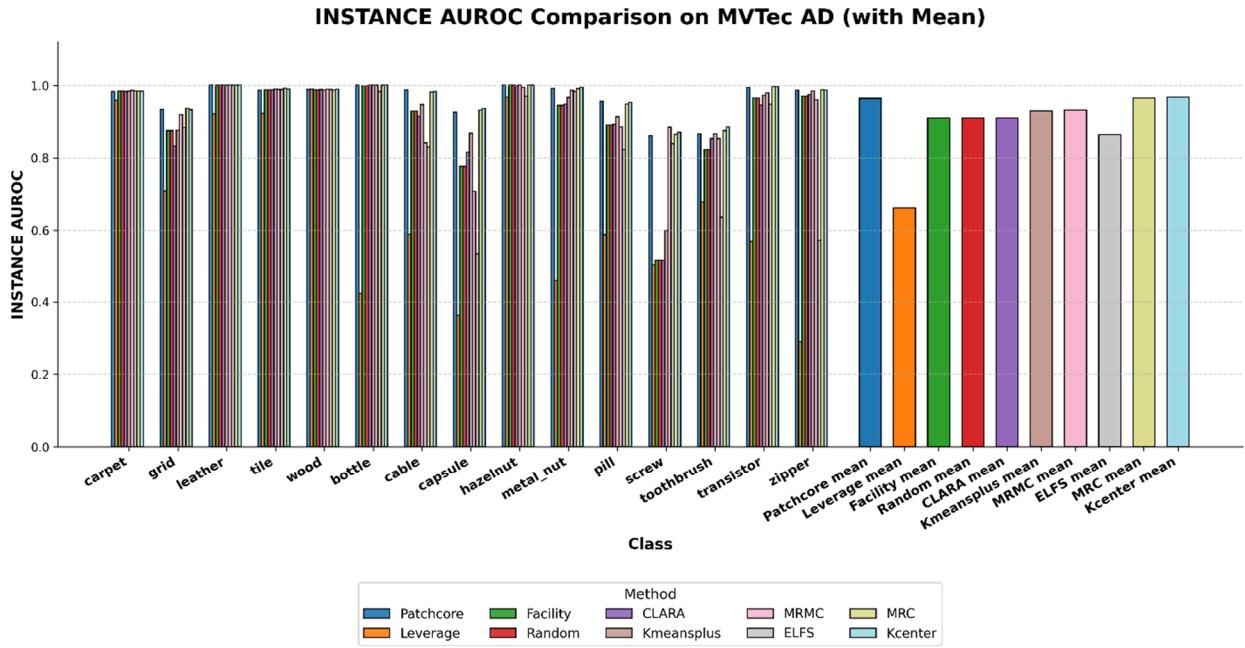
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > Leverage > ELFS

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	25.7766	7.2454	30.2563	6.1607	112.5271	194.7438	15.2578	11.2634	18.4715	333.7108
grid	22.6997	5.8027	26.4962	4.8755	97.369	154.7806	12.3675	9.5315	15.6342	264.3112
leather	20.8397	6.9932	23.3805	5.2852	87.7652	149.7679	11.5975	9.1997	15.5342	388.2805
tile	18.1917	5.5621	22.395	4.5991	79.4511	133.1315	10.3971	8.5407	13.9089	353.7799
wood	20.174	7.4651	23.5879	5.4319	87.9443	150.1404	11.6933	9.4195	15.8832	406.2585
bottle	16.5084	4.5677	19.7869	4.15	63.93	102.8079	8.7069	6.9537	11.2595	184.721
cable	22.9171	5.8298	21.4469	4.9077	74.1301	118.5731	10.7424	8.5605	13.5169	209.6262
capsule	16.4803	5.3409	19.9201	4.5965	69.3353	116.8051	10.4111	7.9082	12.8683	200.2135
hazelnut	47.4684	10.1926	54.0093	8.9353	205.1386	360.6736	23.9976	19.0736	29.5219	675.0195
metal_nut	15.2262	5.5999	20.3374	3.9917	72.4727	116.8786	8.9646	7.0596	12.1858	290.9117
pill	21.1045	6.7126	26.9594	5.2827	97.7713	172.1642	11.9416	10.2449	15.9936	442.8618
screw	30.6402	6.9091	36.3307	6.2319	141.7505	252.0348	15.8898	12.6686	20.6514	481.4489
toothbrush	2.7858	1.7709	4.3779	1.5406	7.8964	10.9981	2.3144	1.8109	2.7125	19.8382
transistor	16.2373	5.576	19.5522	4.9469	64.4339	109.3015	9.7751	7.7581	12.5418	270.5454
zipper	18.1562	5.565	22.3843	4.042	83.5391	138.0192	10.1437	8.0543	13.5455	246.3048
mean	21.014	6.076	24.748	4.999	89.697	152.055	11.613	9.203	14.949	317.855

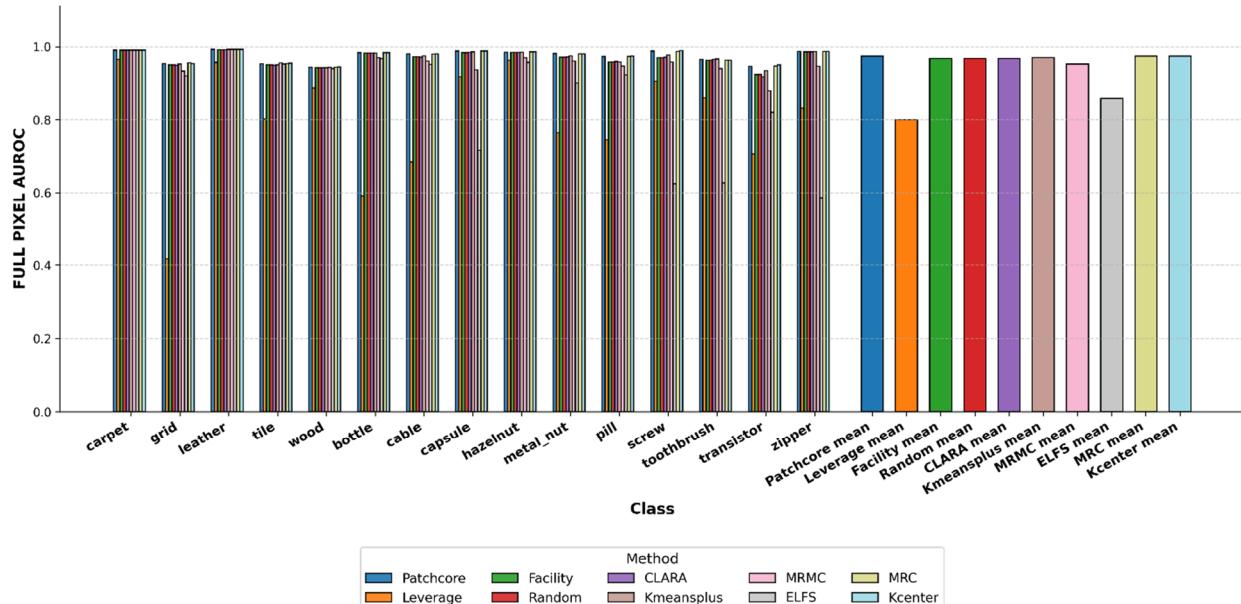
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Top-3 methods by mean INSTANCE AUROC: Kcenter > MRC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9827	0.9587	0.9843	0.9843	0.9831	0.9835	0.9864	0.9843	0.9848	0.9839
grid	0.934	0.7084	0.8747	0.8747	0.8329	0.8764	0.919	0.8839	0.9365	0.9332
leather	1	0.9212	1	1	1	1	1	1	1	1
tile	0.987	0.9228	0.9874	0.9874	0.9874	0.9903	0.9885	0.9885	0.9921	0.9903
wood	0.9886	0.9904	0.9877	0.9877	0.9886	0.9868	0.9895	0.9886	0.9868	0.9895
bottle	1	0.4238	0.9984	0.9984	1	1	1	0.9833	1	1
cable	0.9874	0.5885	0.9293	0.9293	0.9144	0.947	0.8416	0.8293	0.9811	0.9829
capsule	0.9258	0.363	0.7766	0.7766	0.8153	0.868	0.7072	0.5321	0.9322	0.9358
hazelnut	1	0.9675	1	1	0.9993	1	0.995	0.9696	1	1
metal_nut	0.9917	0.4585	0.9448	0.9448	0.9487	0.9668	0.9858	0.9829	0.9912	0.9951
pill	0.9566	0.5876	0.8906	0.8906	0.8925	0.913	0.8854	0.8227	0.9487	0.9534
screw	0.861	0.5026	0.5153	0.5153	0.514	0.5993	0.8842	0.8387	0.8645	0.8703
toothbrush	0.8667	0.6778	0.8222	0.8222	0.8528	0.8667	0.8528	0.6361	0.875	0.8861
transistor	0.9938	0.5667	0.9654	0.9654	0.9454	0.9729	0.9788	0.9475	0.9962	0.9967
zipper	0.9866	0.2904	0.9706	0.9706	0.9748	0.9845	0.9601	0.5701	0.9874	0.9866
mean	0.964	0.662	0.91	0.91	0.91	0.93	0.932	0.864	0.965	0.967

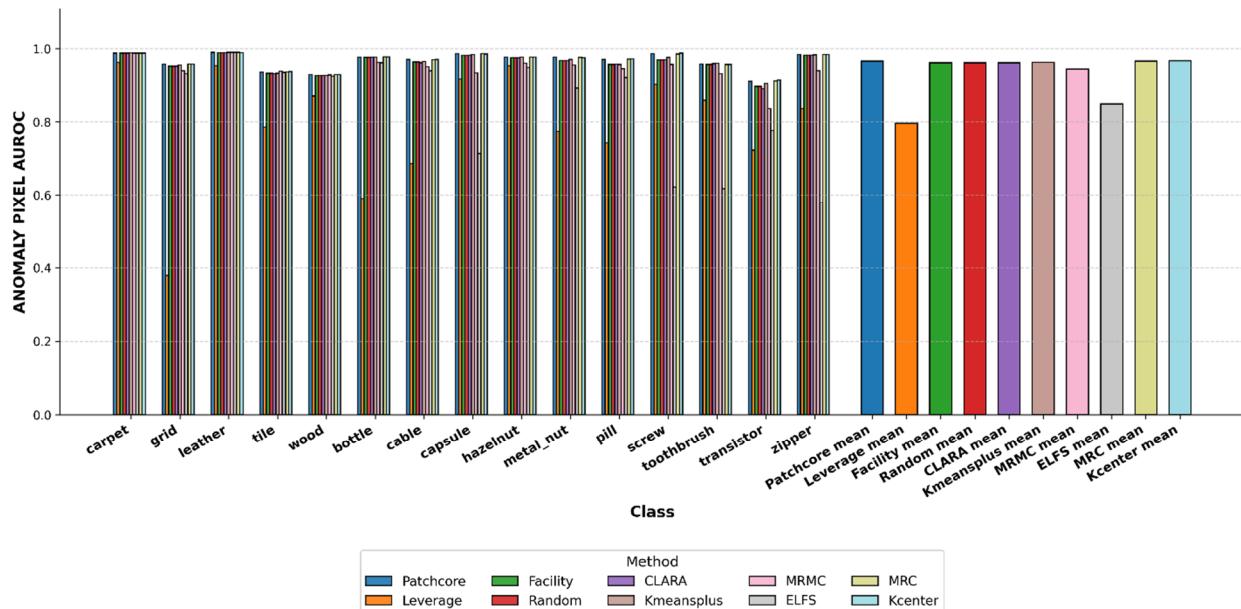
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Patchcore > MRC > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9904	0.9648	0.9906	0.9906	0.9904	0.9907	0.9906	0.9901	0.9903	0.9905
grid	0.9542	0.4172	0.9497	0.9497	0.9495	0.9525	0.933	0.9197	0.9558	0.9535
leather	0.9924	0.9568	0.9922	0.9922	0.9922	0.9924	0.9924	0.9924	0.9924	0.9923
tile	0.9532	0.8015	0.9501	0.9501	0.9494	0.9502	0.955	0.9525	0.9538	0.9545
wood	0.9435	0.8867	0.9418	0.9418	0.9424	0.9423	0.9429	0.9397	0.9436	0.9444
bottle	0.9831	0.5909	0.9823	0.9823	0.9824	0.9824	0.9693	0.9674	0.9831	0.9831
cable	0.9803	0.684	0.9728	0.9728	0.9711	0.975	0.9611	0.9514	0.9796	0.9805
capsule	0.9881	0.9171	0.9832	0.9832	0.9844	0.9858	0.9356	0.7165	0.988	0.9879
hazelnut	0.9852	0.9633	0.9841	0.9841	0.9841	0.9848	0.9691	0.9569	0.9853	0.9854
metal_nut	0.9807	0.7644	0.9707	0.9707	0.9715	0.9745	0.9611	0.9002	0.9799	0.9799
pill	0.9729	0.7452	0.9587	0.9587	0.9594	0.9585	0.947	0.9227	0.973	0.9743
screw	0.9883	0.9046	0.9694	0.9694	0.9706	0.9773	0.958	0.6244	0.9873	0.9894
toothbrush	0.9645	0.8601	0.9627	0.9627	0.9653	0.9659	0.9395	0.6271	0.9631	0.9634
transistor	0.9458	0.7064	0.9232	0.9232	0.9173	0.9342	0.8795	0.8202	0.9472	0.9496
zipper	0.9873	0.8321	0.9858	0.9858	0.9859	0.9868	0.9459	0.5853	0.9871	0.9873
mean	0.974	0.8	0.968	0.968	0.968	0.97	0.952	0.858	0.974	0.974

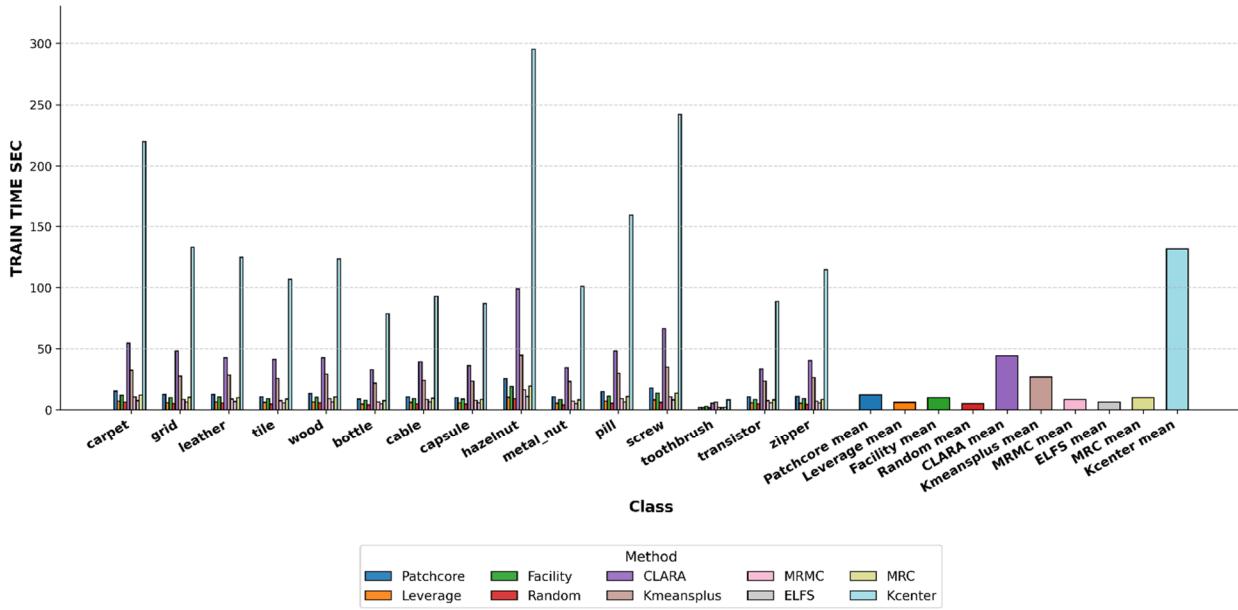
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9878	0.9619	0.988	0.988	0.9878	0.9882	0.9879	0.9874	0.9877	0.9878
grid	0.9573	0.3792	0.9523	0.9523	0.9521	0.9552	0.9395	0.9317	0.9585	0.9578
leather	0.9897	0.9537	0.9895	0.9895	0.9895	0.9897	0.9898	0.9897	0.9897	0.9896
tile	0.936	0.7855	0.9328	0.9328	0.9318	0.9329	0.938	0.9354	0.9368	0.9377
wood	0.9286	0.8707	0.9269	0.9269	0.9274	0.9274	0.928	0.9251	0.9286	0.9298
bottle	0.9772	0.5904	0.9764	0.9764	0.9766	0.9765	0.962	0.961	0.9773	0.9773
cable	0.9706	0.686	0.9638	0.9638	0.9616	0.9654	0.9502	0.9394	0.9699	0.9708
capsule	0.9858	0.9176	0.9814	0.9814	0.9824	0.9837	0.9332	0.7135	0.9858	0.9856
hazelnut	0.9768	0.9533	0.9755	0.9755	0.9756	0.9765	0.9605	0.9483	0.9769	0.977
metal_nut	0.9766	0.7736	0.9672	0.9672	0.9677	0.9709	0.9552	0.8927	0.9758	0.9757
pill	0.971	0.743	0.9569	0.9569	0.9576	0.9566	0.945	0.9211	0.9711	0.9724
screw	0.9863	0.9025	0.9688	0.9688	0.9701	0.9764	0.9568	0.622	0.9854	0.9875
toothbrush	0.9579	0.8593	0.9569	0.9569	0.9592	0.9597	0.9319	0.6178	0.9564	0.9566
transistor	0.9114	0.7228	0.897	0.897	0.8912	0.905	0.8368	0.776	0.9115	0.9145
zipper	0.9839	0.8368	0.9823	0.9823	0.9824	0.9834	0.9394	0.5782	0.9838	0.984
mean	0.966	0.796	0.961	0.961	0.961	0.963	0.944	0.849	0.966	0.967

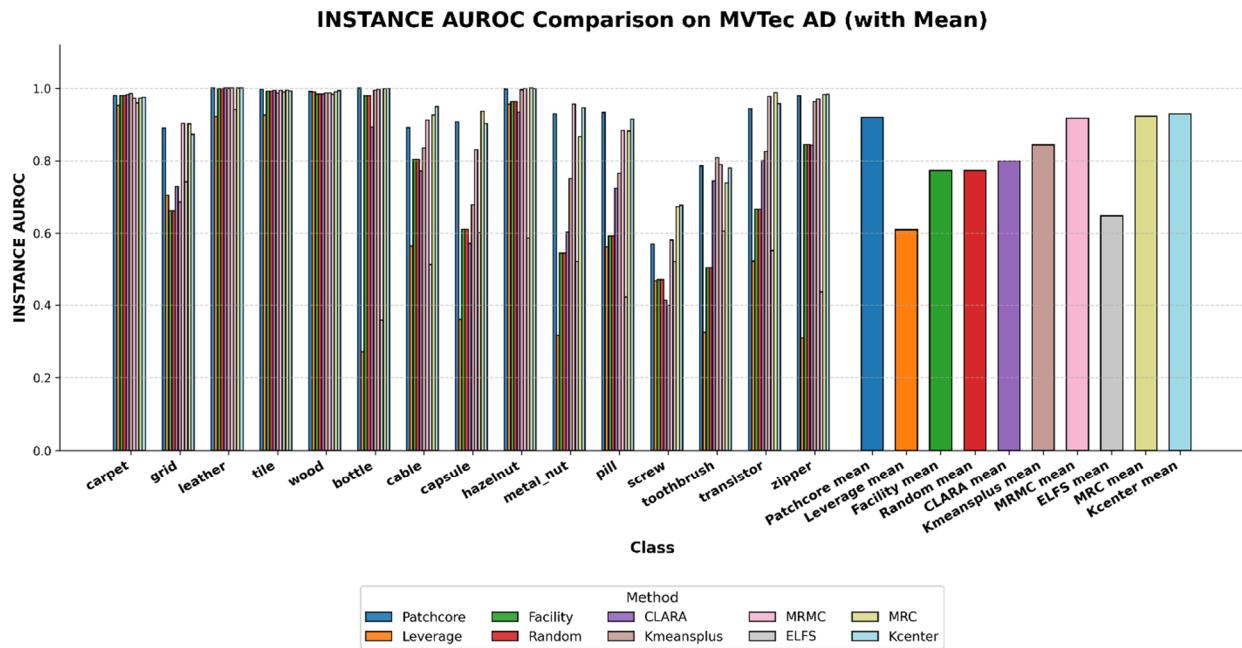
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > Leverage > ELFS

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	15.2735	7.1346	11.7661	6.1828	54.4398	32.2334	10.4244	7.447	11.9224	219.897
grid	12.4809	5.7815	10.0258	4.9858	48.0509	27.4404	8.2857	6.2129	10.1435	132.959
leather	12.4567	6.3943	10.3699	5.4722	42.4138	28.5058	8.6838	6.7775	9.973	124.7199
tile	10.7182	6.024	9.0154	4.732	41.1146	25.7155	7.4279	5.6598	8.8658	106.6387
wood	13.2036	6.453	10.2517	5.8516	42.6044	29.1233	8.9276	6.5618	10.4416	123.2942
bottle	8.8191	4.567	7.8932	4.0024	32.8459	21.6597	6.5507	4.9073	7.4373	78.4945
cable	10.4465	6.0057	9.2255	4.8914	39.3702	23.9951	8.2343	6.4017	9.5147	92.9689
capsule	10.0227	5.4723	8.7469	4.6183	36.1368	23.4124	7.6922	5.7966	8.4628	86.9658
hazelnut	25.4443	10.2053	18.8892	8.9376	98.818	44.6692	16.5069	10.8306	19.484	295.1737
metal_nut	10.5406	5.4075	8.3916	3.9884	34.4066	23.0159	7.1752	5.0003	8.1814	101.0152
pill	14.9349	7.2716	10.9986	5.2984	47.9467	29.8433	9.0947	6.5473	10.7599	159.2453
screw	17.756	8.1315	13.6859	5.9611	66.5871	34.9131	10.677	8.077	13.6259	242.075
toothbrush	1.914	1.699	2.8613	1.563	5.208	6.2327	1.8512	1.6826	2.0606	7.9917
transistor	10.548	5.7325	8.3946	4.9011	33.2293	23.2491	7.3562	5.7302	8.0784	88.717
zipper	10.8233	5.2083	9.2782	4.3947	40.1106	26.297	7.0398	5.4531	8.5491	114.6251
mean	12.359	6.099	9.986	5.052	44.219	26.687	8.395	6.206	9.833	131.652

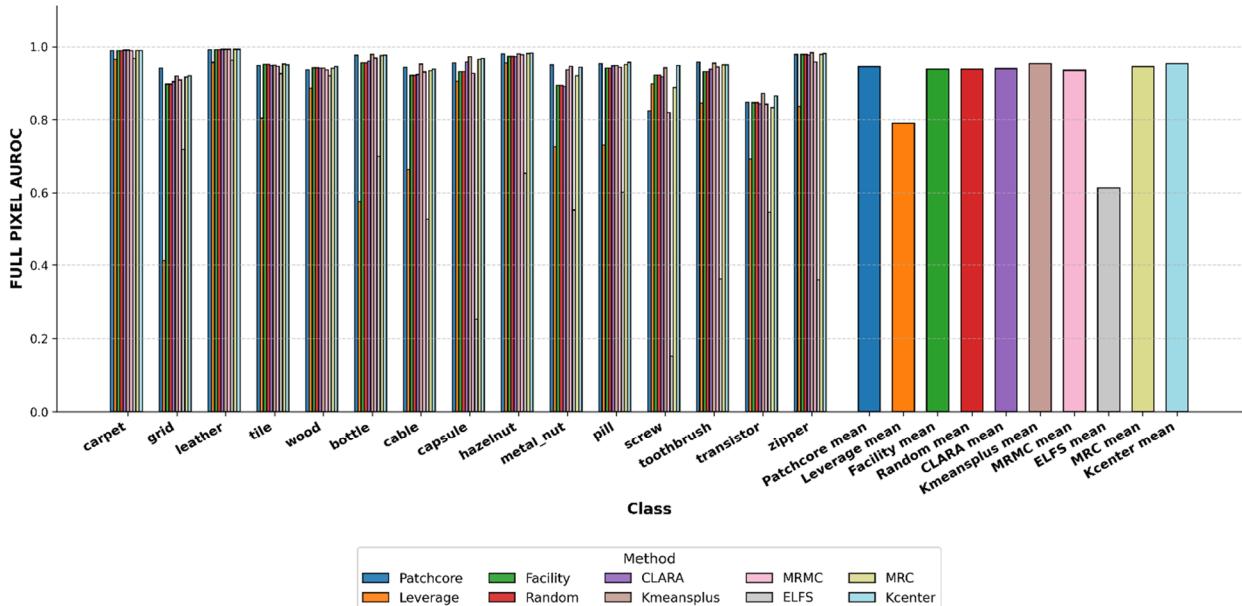
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Top-3 methods by mean INSTANCE AUROC: Kcenter > MRC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9799	0.9522	0.9799	0.9799	0.9819	0.9852	0.9723	0.9599	0.9731	0.9755
grid	0.8897	0.7051	0.6625	0.6625	0.7285	0.6867	0.9031	0.7419	0.9014	0.873
leather	1	0.9219	0.9997	0.9997	1	1	1	0.9406	1	1
tile	0.9964	0.926	0.9917	0.9917	0.9942	0.9867	0.9942	0.9895	0.9946	0.9924
wood	0.9912	0.9904	0.9842	0.9842	0.9842	0.9868	0.9868	0.9833	0.9904	0.993
bottle	1	0.2714	0.9794	0.9794	0.8929	0.9944	0.9968	0.3587	0.9984	0.9992
cable	0.8915	0.5622	0.8036	0.8036	0.7719	0.8353	0.9121	0.5112	0.9262	0.949
capsule	0.9075	0.3606	0.6111	0.6111	0.5692	0.6785	0.8305	0.6011	0.9362	0.9023
hazelnut	0.9982	0.9561	0.9636	0.9636	0.9336	0.9954	0.9996	0.5864	1	0.9989
metal_nut	0.9291	0.3172	0.542	0.542	0.6026	0.7502	0.9565	0.52	0.8666	0.9462
pill	0.9332	0.56	0.5922	0.5922	0.7242	0.7654	0.8833	0.422	0.8822	0.9149
screw	0.5677	0.4661	0.4696	0.4696	0.4134	0.3993	0.5782	0.5192	0.6731	0.6768
toothbrush	0.7861	0.325	0.5028	0.5028	0.7444	0.8083	0.7889	0.6056	0.7389	0.7806
transistor	0.9433	0.5208	0.6663	0.6663	0.8	0.8254	0.9775	0.5496	0.9875	0.9571
zipper	0.9793	0.3096	0.8445	0.8445	0.8427	0.9635	0.9709	0.4359	0.9821	0.9827
mean	0.92	0.61	0.773	0.773	0.799	0.844	0.917	0.648	0.923	0.929

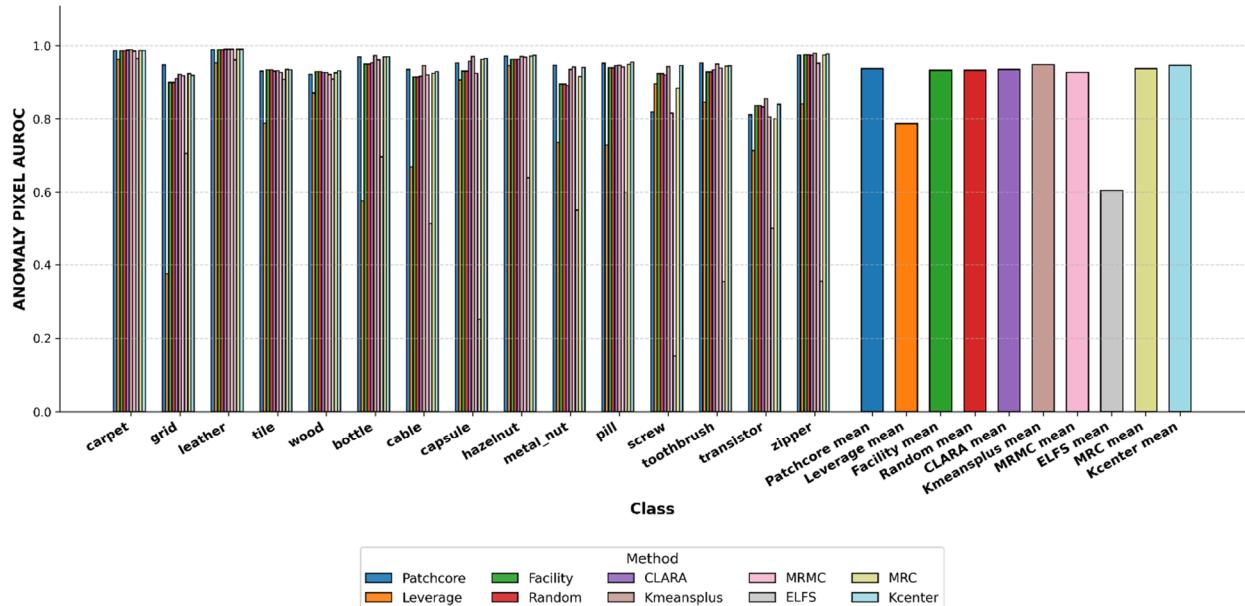
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kmeansplus > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9891	0.9648	0.9889	0.9889	0.99	0.9907	0.9884	0.9679	0.9896	0.9898
grid	0.9412	0.4123	0.8975	0.8975	0.9044	0.92	0.9087	0.7182	0.9163	0.9206
leather	0.9921	0.9571	0.9921	0.9921	0.9924	0.9924	0.9923	0.9633	0.9924	0.9924
tile	0.9481	0.8038	0.9511	0.9511	0.948	0.949	0.9457	0.9259	0.9523	0.9502
wood	0.9371	0.8865	0.9424	0.9424	0.941	0.9412	0.9359	0.9206	0.9404	0.9449
bottle	0.976	0.5733	0.9565	0.9565	0.961	0.979	0.9686	0.6998	0.9754	0.9767
cable	0.9441	0.6637	0.9209	0.9209	0.9239	0.9524	0.9303	0.5251	0.9343	0.9385
capsule	0.9552	0.9057	0.9315	0.9315	0.9585	0.9721	0.9268	0.2527	0.9658	0.968
hazelnut	0.9806	0.9556	0.9731	0.9731	0.9725	0.98	0.9781	0.6529	0.9808	0.9825
metal_nut	0.9499	0.7259	0.8943	0.8943	0.8907	0.9368	0.946	0.5499	0.9208	0.9438
pill	0.9535	0.7308	0.9415	0.9415	0.9478	0.9483	0.9438	0.6008	0.9505	0.9573
screw	0.824	0.8978	0.922	0.922	0.9175	0.9423	0.8198	0.1517	0.8881	0.9481
toothbrush	0.9579	0.8459	0.9311	0.9311	0.9381	0.9548	0.9447	0.3623	0.9503	0.9501
transistor	0.8476	0.6931	0.8463	0.8463	0.8434	0.8725	0.8417	0.5439	0.833	0.865
zipper	0.9786	0.8369	0.9785	0.9785	0.9771	0.9831	0.9582	0.3599	0.979	0.9812
mean	0.945	0.79	0.938	0.938	0.94	0.954	0.935	0.613	0.945	0.954

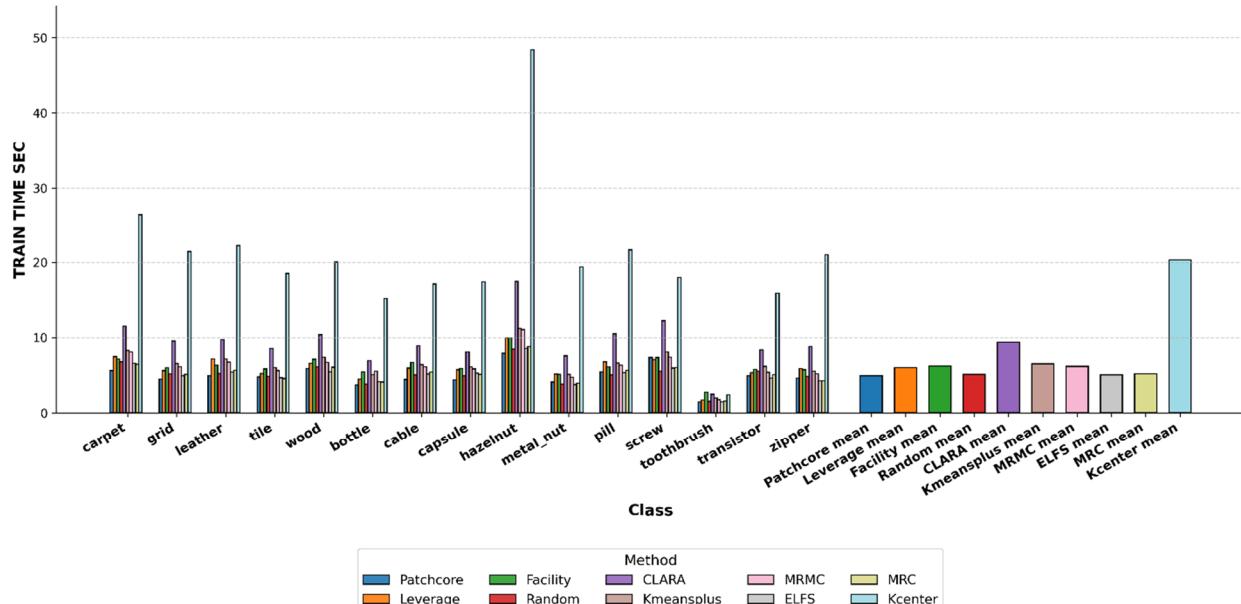
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kmeansplus > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9864	0.962	0.9863	0.9863	0.9875	0.9882	0.9857	0.9645	0.987	0.9873
grid	0.9475	0.3751	0.8997	0.8997	0.91	0.9217	0.918	0.7057	0.9234	0.9186
leather	0.9893	0.954	0.9893	0.9893	0.9898	0.9897	0.9897	0.9611	0.9898	0.9898
tile	0.9305	0.7877	0.9341	0.9341	0.9306	0.9316	0.9275	0.9083	0.9351	0.934
wood	0.9222	0.8706	0.9286	0.9286	0.9262	0.9264	0.9209	0.909	0.9255	0.9309
bottle	0.9693	0.5734	0.9495	0.9495	0.954	0.9728	0.9612	0.6962	0.9688	0.9702
cable	0.9348	0.6684	0.9145	0.9145	0.9164	0.946	0.92	0.5124	0.9244	0.9289
capsule	0.953	0.9066	0.9302	0.9302	0.9574	0.9705	0.9244	0.251	0.9632	0.9656
hazelnut	0.9714	0.9459	0.9628	0.9628	0.9633	0.9707	0.9686	0.6394	0.9715	0.9734
metal_nut	0.9465	0.7356	0.8947	0.8947	0.8909	0.9349	0.9418	0.5487	0.916	0.9406
pill	0.9518	0.729	0.9399	0.9399	0.9462	0.9466	0.942	0.5996	0.9488	0.9555
screw	0.8185	0.896	0.9236	0.9236	0.9192	0.9425	0.8157	0.1515	0.8839	0.9459
toothbrush	0.9529	0.8456	0.9278	0.9278	0.9342	0.9495	0.939	0.354	0.9442	0.9449
transistor	0.8109	0.7133	0.8368	0.8368	0.833	0.8549	0.8053	0.4986	0.8001	0.8398
zipper	0.9742	0.8415	0.9752	0.9752	0.9737	0.9793	0.9524	0.355	0.9747	0.9775
mean	0.937	0.787	0.933	0.933	0.935	0.948	0.927	0.604	0.937	0.947

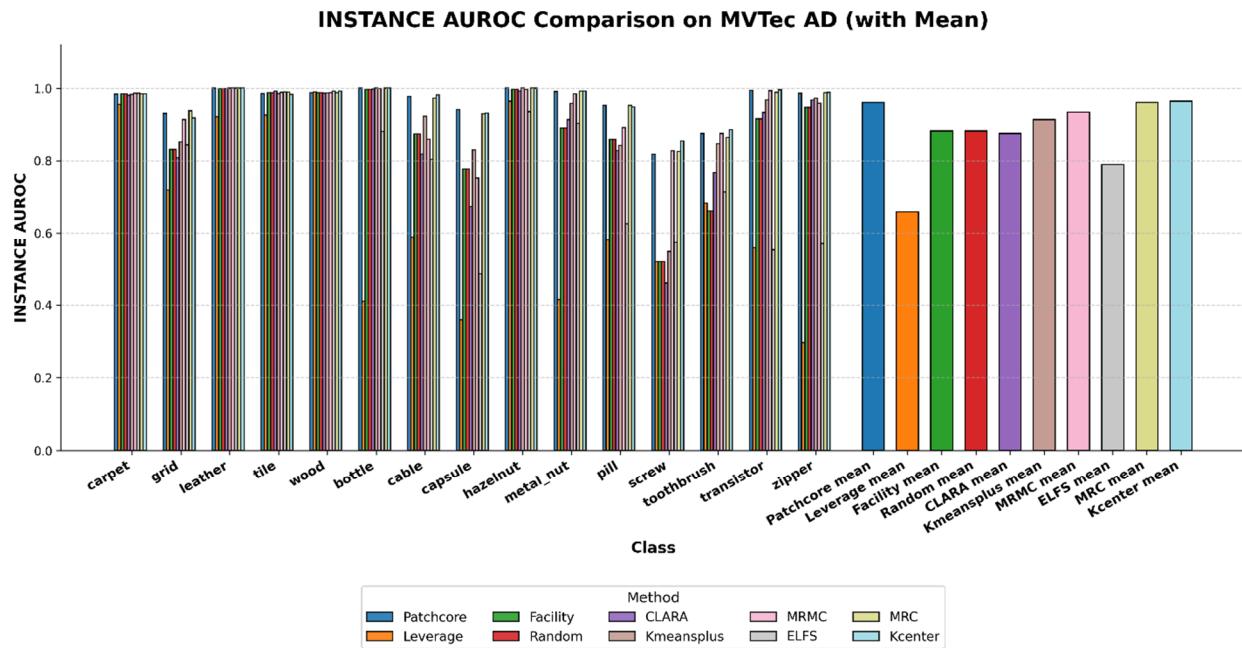
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Patchcore > ELFS > Random

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	5.6107	7.4618	7.1496	6.7649	11.5068	8.2975	8.0873	6.5799	6.4488	26.3238
grid	4.4606	5.5949	5.9859	5.18	9.5369	6.5421	6.1382	4.9398	5.0935	21.4216
leather	4.9206	7.1639	6.3091	5.2238	9.7215	7.148	6.7489	5.4268	5.6305	22.2303
tile	4.7837	5.2344	5.8429	4.8409	8.5446	6.0067	5.6047	4.6594	4.5407	18.519
wood	5.8967	6.5732	7.1005	6.1291	10.3764	7.3993	6.7121	5.4463	6.0599	20.0183
bottle	3.7075	4.4872	5.4575	3.8309	6.9115	5.0606	5.5158	4.1341	4.0946	15.1776
cable	4.4451	5.9615	6.6958	5.054	8.919	6.4066	6.1441	5.1633	5.4156	17.1113
capsule	4.3896	5.7234	5.9182	4.9366	8.0937	6.0883	5.8283	5.2739	5.1115	17.4237
hazelnut	7.9188	9.9458	9.9496	8.4955	17.4598	11.1913	11.0574	8.538	8.8111	48.3722
metal_nut	4.0702	5.1623	5.0932	3.8296	7.5865	5.1048	4.7348	3.7479	3.9242	19.3846
pill	5.4608	6.788	6.0961	5.0251	10.4978	6.6186	6.3068	5.3345	5.65	21.6367
screw	7.3547	7.0682	7.3463	5.5338	12.2152	8.1187	7.3704	5.9455	6.0177	17.9654
toothbrush	1.4399	1.6885	2.7343	1.5281	2.4421	1.9689	1.7479	1.4237	1.5564	2.4026
transistor	4.9098	5.3479	5.7396	5.5424	8.3592	6.1573	5.3874	4.6167	5.0856	15.9006
zipper	4.6184	5.8599	5.7321	4.8575	8.8196	5.5376	5.1983	4.2453	4.26	20.9963
mean	4.932	6.004	6.21	5.118	9.399	6.51	6.172	5.032	5.18	20.326

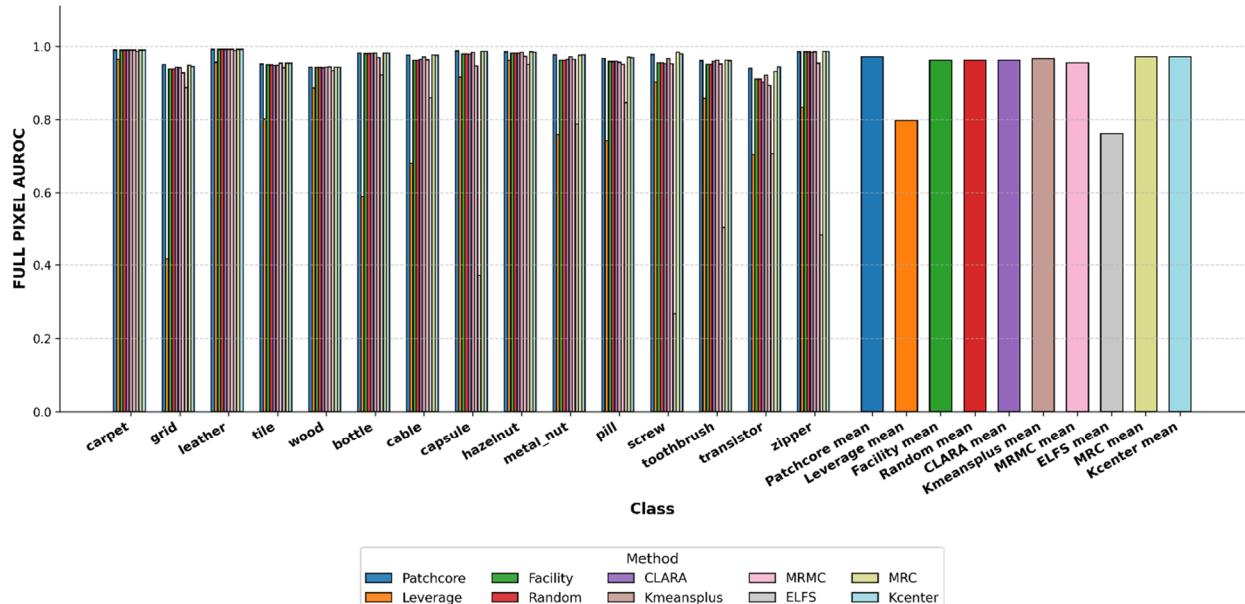
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Top-3 methods by mean INSTANCE AUROC: Kcenter > Patchcore > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9835	0.9559	0.9848	0.9848	0.9807	0.9831	0.986	0.9864	0.9843	0.9848
grid	0.9307	0.7193	0.8312	0.8312	0.8087	0.8521	0.9131	0.8438	0.9373	0.9181
leather	1	0.9215	0.9997	0.9997	0.9997	1	1	1	1	1
tile	0.9852	0.9257	0.9874	0.9874	0.9928	0.9852	0.9885	0.9903	0.9895	0.983
wood	0.9877	0.9904	0.9877	0.9877	0.986	0.9868	0.9877	0.9921	0.9877	0.9921
bottle	1	0.4103	0.996	0.996	0.9976	1	0.9992	0.8802	1	1
cable	0.9764	0.5885	0.8744	0.8744	0.8186	0.923	0.8594	0.8038	0.9728	0.9811
capsule	0.9418	0.3594	0.7774	0.7774	0.6737	0.8293	0.7523	0.4862	0.9298	0.9314
hazelnut	1	0.9643	0.9968	0.9968	0.9921	1	0.9964	0.9354	1	1
metal_nut	0.9912	0.4145	0.89	0.89	0.9135	0.958	0.9844	0.9032	0.9927	0.9927
pill	0.9525	0.5794	0.8587	0.8587	0.8279	0.8421	0.8917	0.6258	0.9523	0.9487
screw	0.8176	0.5196	0.52	0.52	0.4601	0.5468	0.8272	0.572	0.8254	0.8549
toothbrush	0.875	0.6833	0.6611	0.6611	0.7667	0.8472	0.875	0.7139	0.8639	0.8861
transistor	0.9938	0.5575	0.9158	0.9154	0.9333	0.9679	0.9929	0.5517	0.9883	0.9954
zipper	0.9861	0.297	0.9467	0.9467	0.9674	0.973	0.9588	0.5693	0.9877	0.9884
mean	0.961	0.659	0.882	0.882	0.875	0.913	0.934	0.79	0.961	0.964

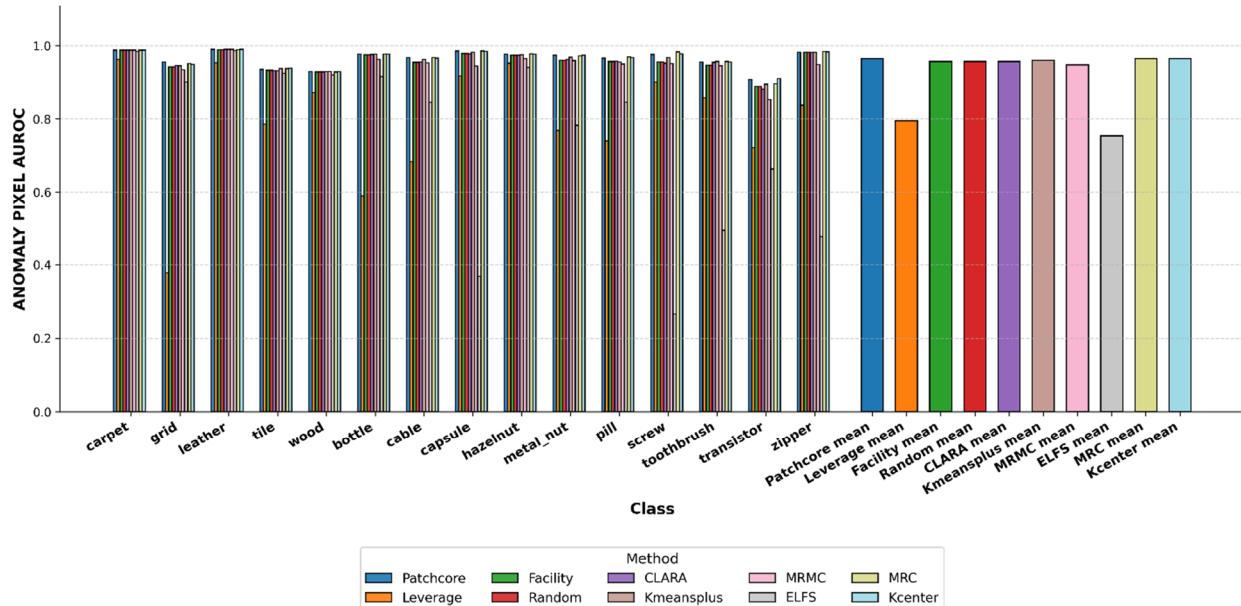
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Patchcore > MRC > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9904	0.9647	0.9905	0.9905	0.9903	0.9905	0.9904	0.9861	0.99	0.9901
grid	0.9507	0.4168	0.9393	0.9393	0.9434	0.9418	0.9278	0.8877	0.9491	0.9455
leather	0.9923	0.9569	0.9922	0.9922	0.9923	0.9923	0.9923	0.9891	0.9923	0.9923
tile	0.9524	0.8013	0.9499	0.9499	0.9486	0.9488	0.9545	0.9421	0.9542	0.9543
wood	0.9436	0.887	0.9425	0.9425	0.9423	0.9438	0.9441	0.9341	0.9434	0.9434
bottle	0.9826	0.5898	0.9812	0.9812	0.982	0.9826	0.9692	0.9225	0.9826	0.9825
cable	0.9771	0.6804	0.9626	0.9626	0.9651	0.9714	0.9635	0.8595	0.9771	0.9763
capsule	0.9876	0.9162	0.9798	0.9798	0.9791	0.9843	0.9468	0.371	0.9873	0.9869
hazelnut	0.9853	0.9619	0.9826	0.9826	0.9821	0.9839	0.9734	0.9503	0.9855	0.9849
metal_nut	0.9778	0.7587	0.9632	0.9632	0.965	0.9722	0.9645	0.7881	0.9762	0.9778
pill	0.9674	0.7422	0.9588	0.9588	0.9601	0.9568	0.9515	0.8465	0.9707	0.9694
screw	0.9784	0.903	0.9561	0.9561	0.9527	0.9672	0.9531	0.2668	0.9844	0.98
toothbrush	0.9617	0.8583	0.9514	0.9514	0.9599	0.9627	0.952	0.5025	0.9631	0.9618
transistor	0.9406	0.7044	0.911	0.911	0.9027	0.9217	0.894	0.7068	0.9317	0.9442
zipper	0.9859	0.8331	0.9853	0.9853	0.9849	0.9857	0.9544	0.4824	0.9869	0.9865
mean	0.972	0.798	0.963	0.963	0.963	0.967	0.955	0.762	0.972	0.972

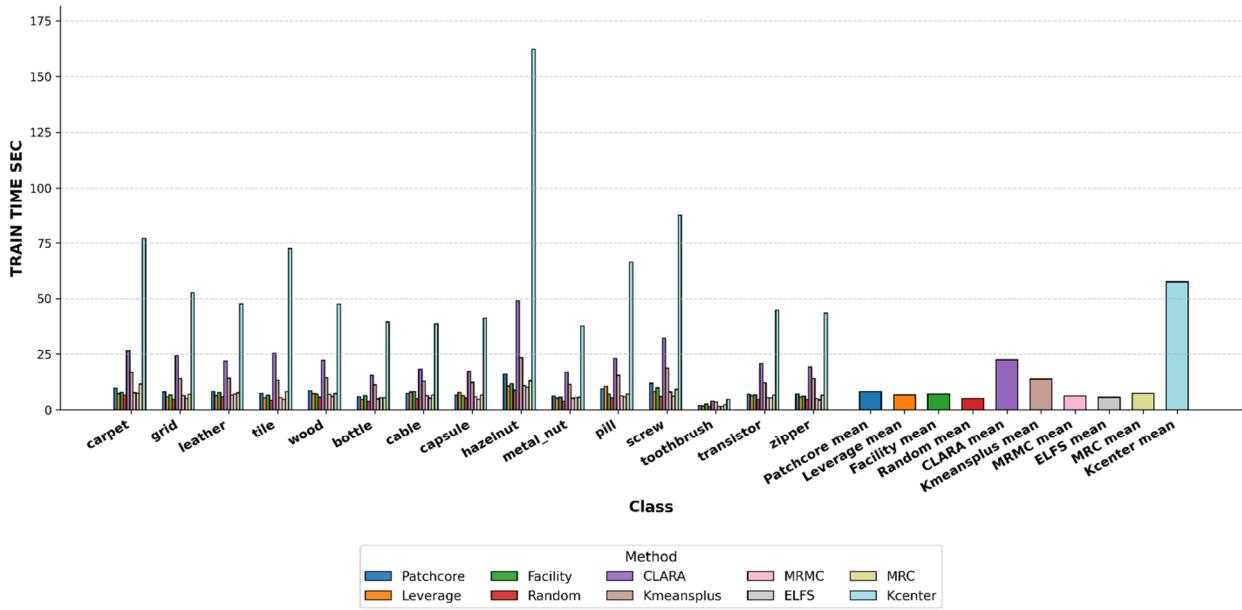
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Patchcore > MRC > Kcenter

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9878	0.9618	0.9879	0.9879	0.9877	0.988	0.9877	0.9834	0.9873	0.9875
grid	0.9551	0.3783	0.9422	0.9422	0.946	0.945	0.934	0.9007	0.9514	0.949
leather	0.9897	0.9538	0.9895	0.9895	0.9896	0.9896	0.9896	0.9861	0.9895	0.9896
tile	0.935	0.7854	0.9325	0.9325	0.9315	0.9313	0.9372	0.9243	0.9372	0.9379
wood	0.9288	0.8712	0.9278	0.9278	0.9277	0.9291	0.9294	0.9201	0.9283	0.9287
bottle	0.9767	0.5894	0.9751	0.9751	0.9762	0.9767	0.962	0.9158	0.9767	0.9766
cable	0.9672	0.6831	0.9542	0.9542	0.9558	0.9622	0.9528	0.8448	0.9673	0.9661
capsule	0.9854	0.9169	0.9781	0.9781	0.9776	0.9824	0.9445	0.3676	0.9851	0.9846
hazelnut	0.9769	0.9521	0.9738	0.9738	0.9733	0.9754	0.9645	0.9407	0.9773	0.9764
metal_nut	0.9737	0.7681	0.9597	0.9597	0.9618	0.9686	0.9592	0.7822	0.9719	0.9737
pill	0.9656	0.74	0.957	0.957	0.9584	0.9549	0.9497	0.8456	0.9688	0.9675
screw	0.9763	0.9011	0.9561	0.9561	0.9522	0.9671	0.9511	0.2659	0.9826	0.9778
toothbrush	0.955	0.8578	0.9462	0.9462	0.9545	0.9566	0.9449	0.4935	0.9564	0.9551
transistor	0.9072	0.7216	0.8883	0.8883	0.8804	0.8944	0.8528	0.6632	0.8965	0.9099
zipper	0.9824	0.8377	0.9819	0.9819	0.9813	0.9822	0.9482	0.4761	0.9835	0.9831
mean	0.964	0.795	0.957	0.957	0.957	0.96	0.947	0.754	0.964	0.964

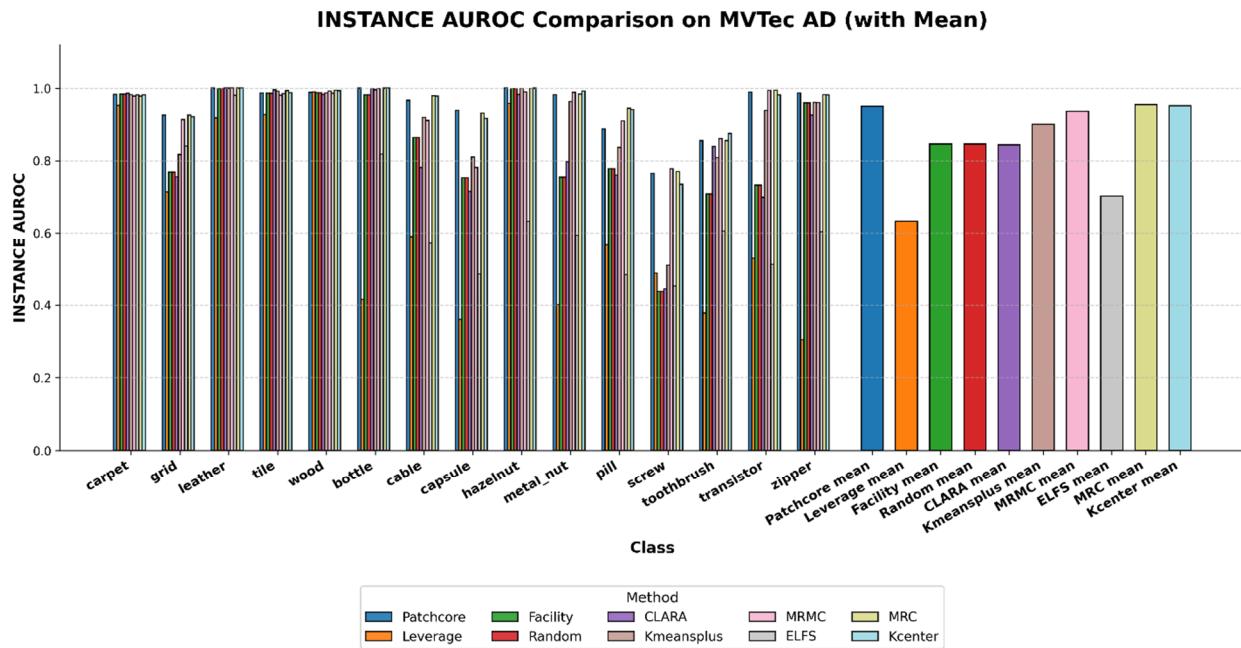
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	9.6385	7.1811	7.829	6.5887	26.5525	16.7689	7.6408	7.4606	11.5997	77.0126
grid	8.0082	5.8602	6.7625	4.7328	24.3902	14.1446	6.3122	5.1167	7.0086	52.7025
leather	8.2992	6.3188	7.9288	5.8567	21.879	14.1875	6.6257	7.0719	7.5849	47.5842
tile	7.3733	5.415	6.612	4.33	25.4001	13.2923	5.4694	4.6738	8.0619	72.414
wood	8.5242	7.2921	7.147	5.6299	22.2598	14.394	6.9777	5.9498	7.2233	47.3959
bottle	5.8689	4.5961	6.3238	3.83	15.4312	11.1811	4.8075	5.3423	5.3721	39.3962
cable	7.3874	7.972	8.2201	5.073	18.1534	12.8285	6.3671	5.1897	6.6224	38.5677
capsule	6.6451	7.8638	6.3549	5.2486	17.2683	12.3051	5.8505	4.7178	6.5649	41.1191
hazelnut	16.0854	10.7064	11.74	8.6956	48.9225	23.3741	10.8471	10.1271	13.1306	162.0974
metal_nut	6.2128	5.1849	5.5595	3.9499	16.7207	11.3964	5.1917	5.4737	5.5866	37.59
pill	9.4297	10.5848	7.1175	5.2715	23.0635	15.5143	6.2016	5.8208	7.1551	66.3404
screw	11.8709	8.1583	9.8762	5.9406	32.2142	18.6322	7.9532	6.1189	9.1912	87.3938
toothbrush	1.8457	1.674	2.5907	1.4929	3.881	3.5261	1.5062	1.5619	2.2696	4.6406
transistor	6.953	6.3346	6.669	4.5064	20.7643	12.1969	5.4857	5.3309	6.6097	44.7577
zipper	7.0548	5.7711	6.0321	4.6061	19.307	14.0589	5.1306	4.4546	6.439	43.3438
mean	8.08	6.728	7.118	5.05	22.414	13.853	6.158	5.627	7.361	57.49

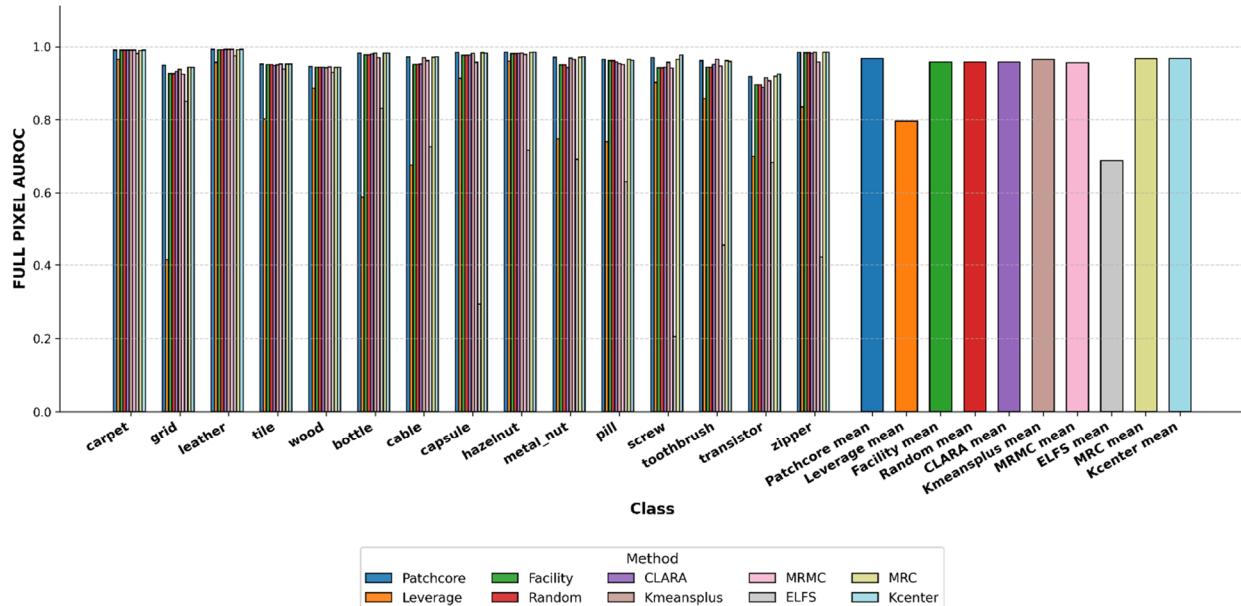
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Top-3 methods by mean INSTANCE AUROC: MRC > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9827	0.9526	0.9835	0.9835	0.986	0.9823	0.9783	0.9811	0.9783	0.9811
grid	0.9256	0.7135	0.7686	0.7686	0.7552	0.817	0.9131	0.8404	0.9256	0.9215
leather	1	0.9178	0.9997	0.9997	1	1	1	0.981	1	1
tile	0.987	0.9275	0.9863	0.9863	0.9957	0.9913	0.9809	0.9852	0.9935	0.9874
wood	0.9886	0.9904	0.9877	0.9877	0.9833	0.9868	0.9921	0.986	0.9939	0.993
bottle	1	0.4159	0.9817	0.9817	0.9992	0.9952	0.9992	0.819	1	1
cable	0.9668	0.5905	0.8638	0.8638	0.7813	0.9198	0.9114	0.5708	0.9792	0.9786
capsule	0.939	0.3606	0.7531	0.7531	0.7156	0.8101	0.7814	0.485	0.931	0.9162
hazelnut	1	0.9579	0.9986	0.9986	0.9832	0.9993	0.9993	0.6325	0.9996	1
metal_nut	0.9819	0.4018	0.7542	0.7542	0.7977	0.9633	0.9883	0.5943	0.9839	0.9927
pill	0.8879	0.566	0.778	0.778	0.761	0.8369	0.9103	0.4834	0.9444	0.9411
screw	0.7647	0.4874	0.4376	0.4376	0.4446	0.5097	0.7776	0.4526	0.7698	0.7348
toothbrush	0.8556	0.3778	0.7083	0.7083	0.8389	0.8083	0.8611	0.6056	0.8556	0.875
transistor	0.9896	0.5283	0.7325	0.7325	0.6992	0.9387	0.9942	0.5117	0.995	0.9817
zipper	0.9869	0.3041	0.9593	0.9593	0.9262	0.9609	0.9606	0.6045	0.9819	0.9814
mean	0.95	0.633	0.846	0.846	0.844	0.901	0.936	0.702	0.955	0.952

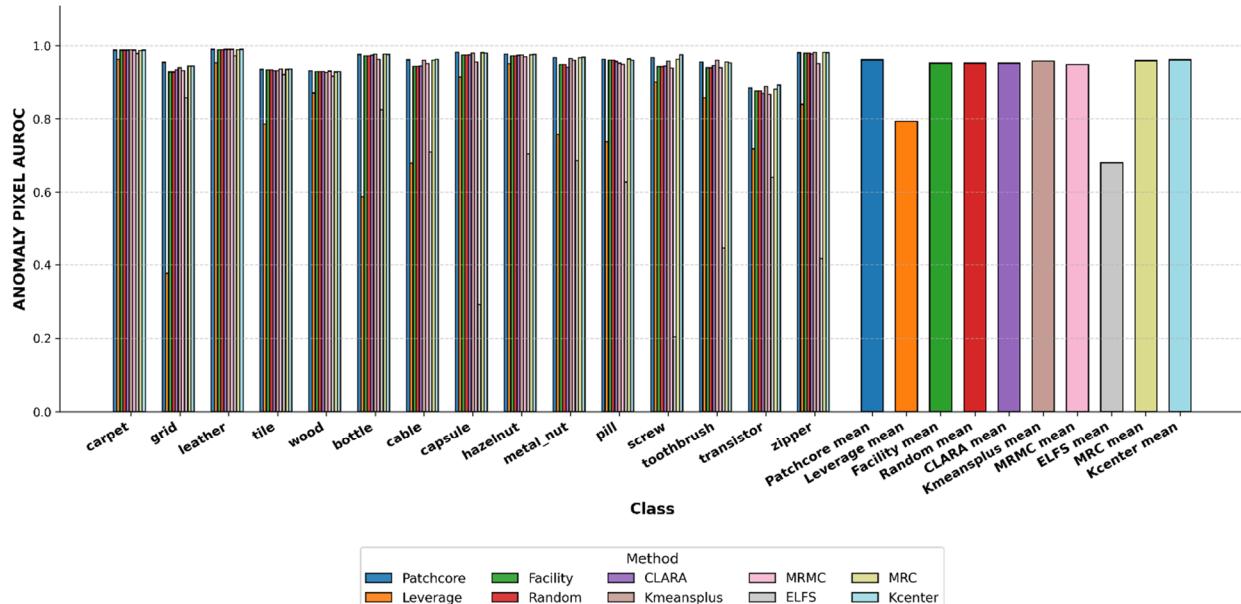
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Patchcore > Kcenter > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9902	0.9648	0.9901	0.9901	0.9905	0.9906	0.99	0.9807	0.9897	0.9901
grid	0.9493	0.415	0.9256	0.9256	0.9319	0.9375	0.924	0.8503	0.9438	0.9428
leather	0.9923	0.9568	0.9921	0.9921	0.9924	0.9923	0.9924	0.9746	0.9922	0.9924
tile	0.9526	0.8019	0.9509	0.9509	0.9484	0.9496	0.9525	0.9385	0.9523	0.9524
wood	0.9455	0.8865	0.9434	0.9434	0.9439	0.9419	0.9447	0.9299	0.9429	0.9437
bottle	0.9822	0.5878	0.9781	0.9781	0.9802	0.9823	0.969	0.8312	0.9827	0.9823
cable	0.9716	0.6759	0.9518	0.9518	0.9525	0.9691	0.9618	0.7253	0.9706	0.9727
capsule	0.9844	0.9136	0.9765	0.9765	0.9771	0.9814	0.9572	0.2938	0.983	0.9823
hazelnut	0.9849	0.9604	0.9812	0.9812	0.9819	0.9829	0.9785	0.7165	0.9843	0.9846
metal_nut	0.971	0.7482	0.9499	0.9499	0.9432	0.9683	0.9648	0.6913	0.971	0.9723
pill	0.9645	0.7397	0.9618	0.9618	0.9584	0.9536	0.9505	0.6296	0.9652	0.962
screw	0.9699	0.9018	0.9421	0.9421	0.9435	0.9572	0.9411	0.2051	0.9646	0.9773
toothbrush	0.9617	0.8578	0.9434	0.9434	0.9516	0.9655	0.9466	0.4546	0.9615	0.9594
transistor	0.9183	0.7	0.8953	0.8953	0.8884	0.9149	0.9062	0.6826	0.9186	0.9252
zipper	0.9844	0.835	0.9834	0.9834	0.9815	0.9848	0.9575	0.422	0.9848	0.9846
mean	0.968	0.796	0.958	0.958	0.958	0.965	0.956	0.688	0.967	0.968

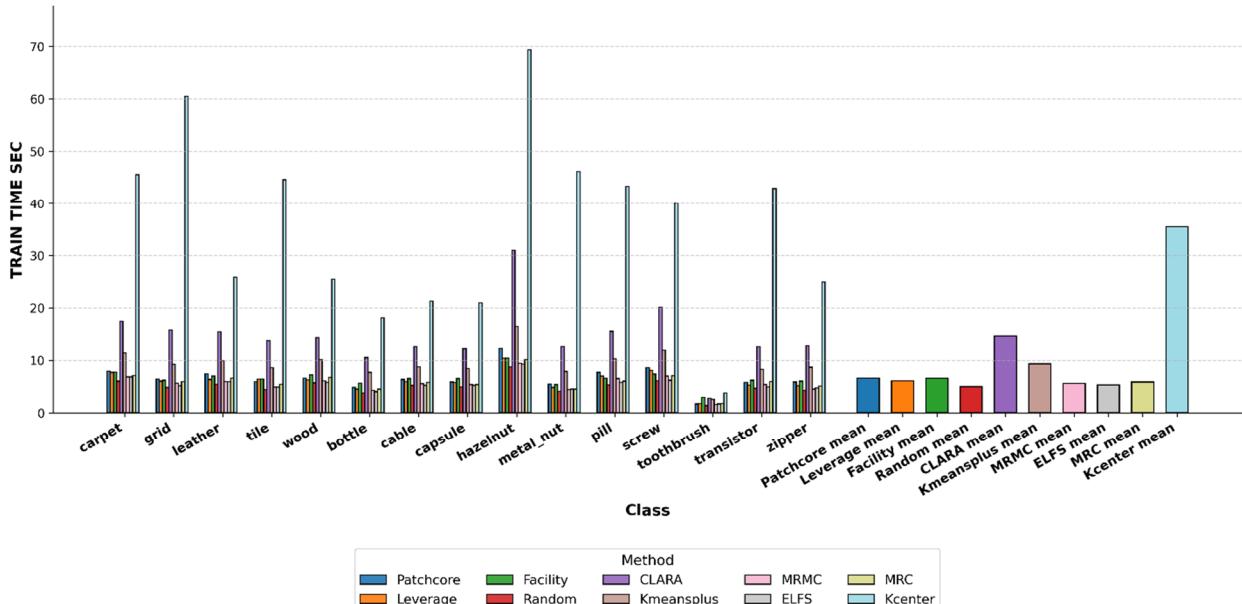
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Patchcore > Kcenter > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9876	0.962	0.9874	0.9874	0.9879	0.9881	0.9873	0.9781	0.987	0.9875
grid	0.9546	0.3765	0.9281	0.9281	0.9344	0.9393	0.9315	0.8578	0.944	0.9445
leather	0.9896	0.9537	0.9893	0.9893	0.9897	0.9896	0.9897	0.972	0.9895	0.9897
tile	0.9353	0.7859	0.9336	0.9336	0.9312	0.9322	0.9355	0.9207	0.9352	0.936
wood	0.9311	0.8705	0.9289	0.9289	0.9294	0.927	0.93	0.9165	0.9278	0.9291
bottle	0.9762	0.5875	0.9718	0.9718	0.974	0.9765	0.9617	0.8247	0.9769	0.9763
cable	0.9616	0.6793	0.9436	0.9436	0.9441	0.9601	0.9511	0.7096	0.9608	0.9627
capsule	0.9822	0.9143	0.9747	0.9747	0.9755	0.9797	0.9551	0.2909	0.9807	0.98
hazelnut	0.9764	0.9504	0.9721	0.9721	0.9734	0.9741	0.9696	0.7039	0.9756	0.976
metal_nut	0.9671	0.7577	0.9478	0.9478	0.9408	0.9649	0.9598	0.6866	0.9667	0.9682
pill	0.9628	0.7376	0.9602	0.9602	0.9568	0.9518	0.9487	0.6275	0.9633	0.96
screw	0.9677	0.9	0.9426	0.9426	0.9443	0.9578	0.939	0.2039	0.9628	0.9749
toothbrush	0.9553	0.8574	0.9398	0.9398	0.9459	0.9598	0.9399	0.4452	0.9549	0.9531
transistor	0.8847	0.7178	0.8764	0.8764	0.8695	0.8886	0.8664	0.6409	0.8811	0.8923
zipper	0.9807	0.8396	0.9797	0.9797	0.9779	0.9812	0.9515	0.4164	0.9812	0.9809
mean	0.961	0.793	0.952	0.952	0.952	0.958	0.948	0.68	0.959	0.961

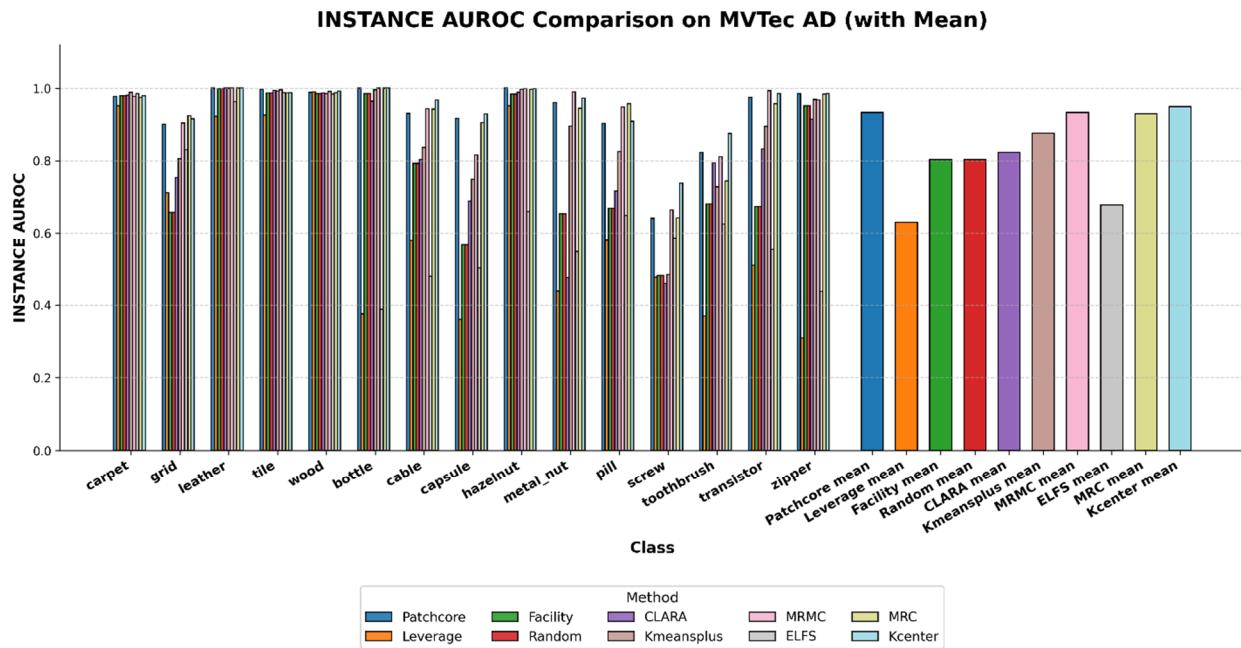
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	7.9283	7.7099	7.759	6.0046	17.4172	11.4155	6.8608	6.8635	7.1227	45.5296
grid	6.4473	6.0015	6.181	4.8144	15.8169	9.2039	5.6303	5.1364	5.892	60.54
leather	7.4448	6.3605	6.9784	5.4269	15.409	9.9478	5.9928	5.8934	6.6268	25.8203
tile	5.9329	6.4139	6.4513	4.4007	13.7218	8.5669	4.8896	4.8659	5.4362	44.5543
wood	6.6454	6.3036	7.2047	5.6732	14.3556	10.147	6.0537	5.8181	6.7512	25.4678
bottle	4.8264	4.5045	5.6582	3.8068	10.509	7.7299	4.2967	4.0139	4.5068	18.0651
cable	6.373	5.9394	6.521	5.1993	12.6259	8.7999	5.5312	5.1913	5.831	21.2757
capsule	5.868	5.7401	6.5007	4.9407	12.2043	8.4914	5.3499	5.1988	5.375	20.9561
hazelnut	12.2854	10.4418	10.459	8.7366	30.9897	16.4337	9.4689	9.2938	10.1636	69.346
metal_nut	5.4922	4.8446	5.3941	4.0512	12.6539	7.8777	4.3751	4.4954	4.4897	46.1544
pill	7.7041	7.0192	6.5579	5.3406	15.5286	10.3007	6.5292	5.8218	6.0051	43.3016
screw	8.6183	8.0975	7.3758	6.1348	20.1274	11.9407	7.0143	6.1672	7.0658	39.9691
toothbrush	1.6981	1.725	2.9453	1.3773	2.7789	2.5431	1.5903	1.6574	1.7529	3.8143
transistor	5.7885	5.2452	6.1967	4.6596	12.5687	8.3219	5.3674	4.9357	5.9775	42.9039
zipper	5.8681	5.1761	6.0082	4.2686	12.7844	8.6766	4.5037	4.7249	5.1013	24.8923
mean	6.595	6.102	6.546	4.989	14.633	9.36	5.564	5.339	5.873	35.506

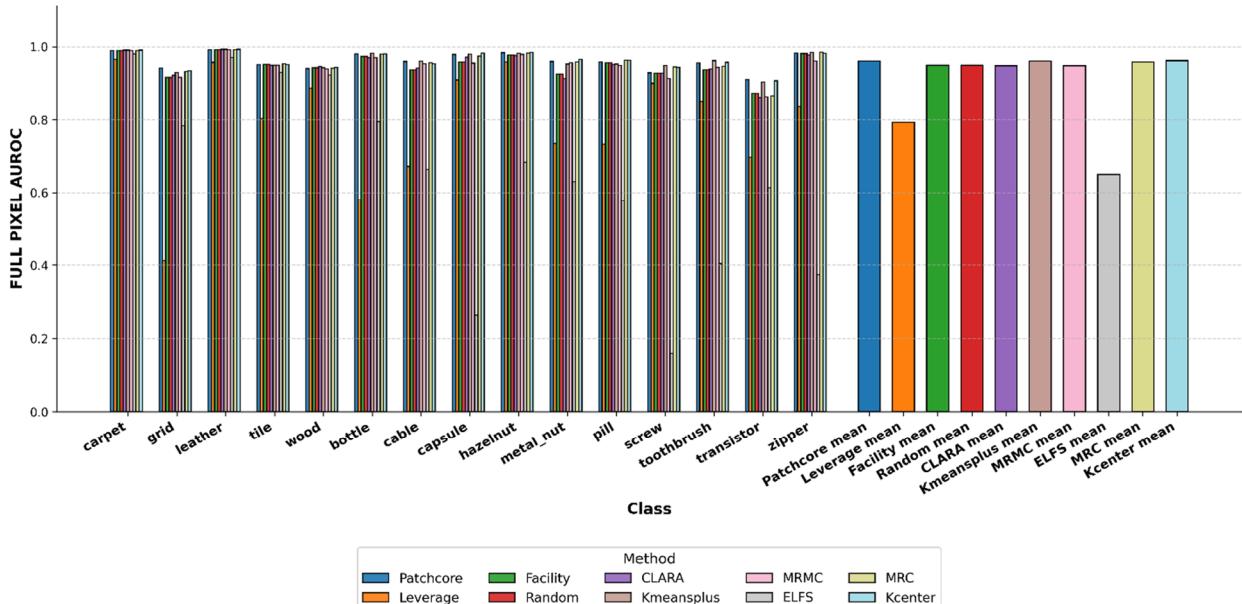
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Top-3 methods by mean INSTANCE AUROC: Kcenter > Patchcore > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9775	0.9518	0.9791	0.9791	0.9803	0.9884	0.9775	0.9856	0.9743	0.9791
grid	0.9006	0.7118	0.6575	0.6575	0.7536	0.8053	0.9039	0.8304	0.924	0.9156
leather	1.0000	0.9229	0.9997	0.9997	1.0000	1.0000	1.0000	0.9626	1.0000	1.0000
tile	0.9971	0.926	0.9867	0.9867	0.9939	0.9928	0.9957	0.9874	0.987	0.9881
wood	0.9886	0.9904	0.9851	0.9851	0.9868	0.9851	0.9912	0.9842	0.9877	0.9921
bottle	1.0000	0.3754	0.9857	0.9857	0.9643	0.9952	1.0000	0.3881	1.0000	1.0000
cable	0.9305	0.5778	0.7925	0.7925	0.8032	0.837	0.9434	0.4788	0.9421	0.9672
capsule	0.9166	0.3606	0.566	0.566	0.6889	0.7491	0.8165	0.5018	0.9055	0.9294
hazelnut	1.0000	0.9514	0.9839	0.9839	0.9882	0.9968	0.9996	0.6596	0.9968	0.9989
metal_nut	0.9604	0.4384	0.6535	0.6535	0.4756	0.8954	0.9902	0.5474	0.9448	0.9731
pill	0.9032	0.5786	0.6694	0.6694	0.7158	0.8249	0.9479	0.6492	0.9574	0.9086
screw	0.6409	0.4765	0.481	0.481	0.4591	0.4837	0.6641	0.5852	0.6428	0.7381
toothbrush	0.8222	0.3694	0.6806	0.6806	0.7944	0.7278	0.8111	0.625	0.7444	0.875
transistor	0.975	0.5096	0.6738	0.6738	0.8325	0.8946	0.9929	0.5525	0.9571	0.9854
zipper	0.9856	0.3096	0.9519	0.9519	0.9144	0.969	0.9672	0.4378	0.984	0.9856
mean	0.933	0.63	0.803	0.803	0.823	0.876	0.933	0.678	0.93	0.949

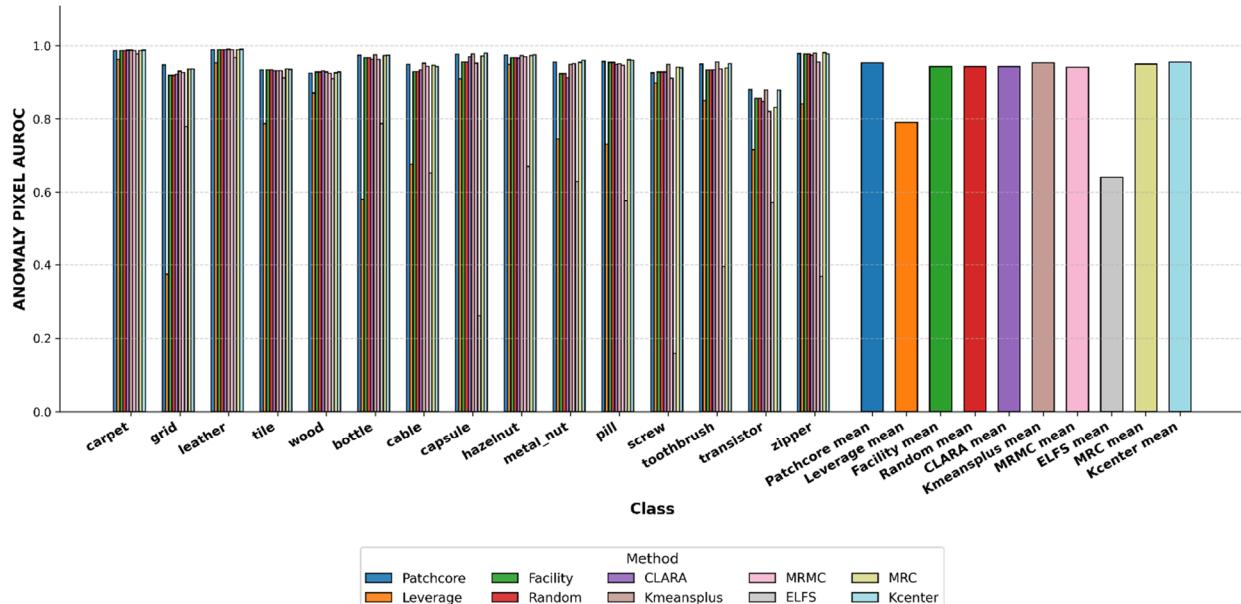
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kcenter > Patchcore > Kmeansplus

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9898	0.965	0.9897	0.9897	0.9904	0.9907	0.9896	0.9807	0.9895	0.9901
grid	0.9416	0.4125	0.9157	0.9157	0.9211	0.9287	0.9155	0.7838	0.9321	0.9339
leather	0.9922	0.957	0.9921	0.9921	0.9924	0.9924	0.9923	0.97	0.9922	0.9925
tile	0.9508	0.8029	0.9517	0.9517	0.949	0.9496	0.9494	0.9299	0.9535	0.9511
wood	0.9403	0.8867	0.9424	0.9424	0.945	0.9425	0.9391	0.9221	0.9408	0.9428
bottle	0.9803	0.5796	0.9735	0.9735	0.9693	0.9817	0.9694	0.7947	0.9798	0.9804
cable	0.9593	0.6721	0.936	0.936	0.9414	0.9601	0.9534	0.6641	0.9561	0.9534
capsule	0.979	0.909	0.9579	0.9579	0.9711	0.9794	0.9543	0.2631	0.9739	0.9825
hazelnut	0.9836	0.9588	0.9769	0.9769	0.9757	0.982	0.9791	0.6838	0.9826	0.984
metal_nut	0.9593	0.7351	0.9249	0.9249	0.9131	0.9521	0.9561	0.6302	0.9584	0.9645
pill	0.9586	0.7332	0.9563	0.9563	0.9508	0.9522	0.9484	0.5774	0.9633	0.9622
screw	0.9283	0.8993	0.9274	0.9274	0.9272	0.9488	0.9129	0.1592	0.9442	0.943
toothbrush	0.9554	0.85	0.9367	0.9367	0.939	0.9615	0.9434	0.4037	0.9463	0.9572
transistor	0.9094	0.6968	0.8717	0.8717	0.8608	0.9029	0.8619	0.6136	0.8657	0.9068
zipper	0.9823	0.8367	0.981	0.981	0.9775	0.984	0.9609	0.3735	0.9847	0.9816
mean	0.961	0.793	0.949	0.949	0.948	0.961	0.948	0.65	0.958	0.962

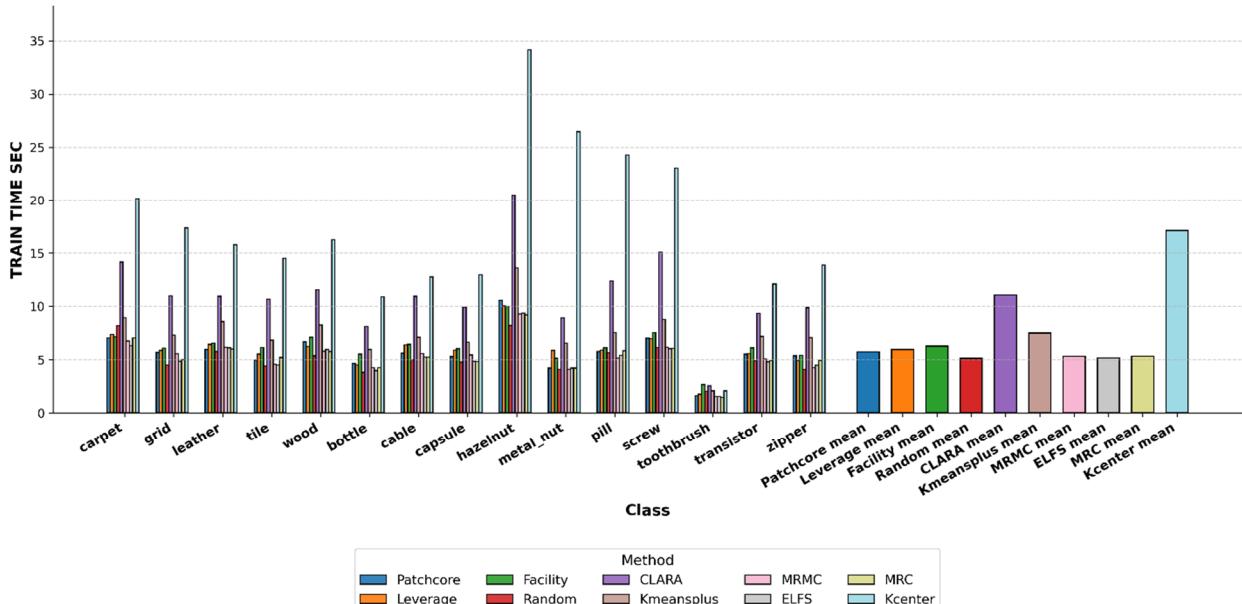
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kcenter > Patchcore > Kmeansplus

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9872	0.9621	0.987	0.987	0.9879	0.9882	0.9869	0.9778	0.9868	0.9875
grid	0.9473	0.3745	0.9189	0.9189	0.922	0.9305	0.927	0.7791	0.9357	0.937
leather	0.9895	0.9539	0.9894	0.9894	0.9897	0.9898	0.9896	0.9676	0.9895	0.9899
tile	0.9337	0.7869	0.9347	0.9347	0.932	0.9324	0.9318	0.9122	0.9365	0.9349
wood	0.925	0.8706	0.9282	0.9282	0.9312	0.9278	0.9244	0.9094	0.9257	0.928
bottle	0.974	0.5795	0.967	0.967	0.9627	0.9758	0.9621	0.7875	0.9733	0.9742
cable	0.949	0.6761	0.929	0.929	0.9339	0.9521	0.9434	0.652	0.9466	0.9429
capsule	0.9767	0.9099	0.9563	0.9563	0.9698	0.9777	0.952	0.2608	0.9716	0.9803
hazelnut	0.9749	0.9489	0.9671	0.9671	0.9658	0.973	0.9698	0.6705	0.9733	0.9753
metal_nut	0.9549	0.745	0.9238	0.9238	0.9128	0.9493	0.9512	0.629	0.9545	0.9608
pill	0.957	0.7313	0.9546	0.9546	0.9491	0.9504	0.9466	0.5749	0.9614	0.9604
screw	0.9262	0.8976	0.9283	0.9283	0.928	0.9493	0.911	0.1585	0.9413	0.9396
toothbrush	0.9495	0.8497	0.9334	0.9334	0.9347	0.9559	0.937	0.3953	0.9393	0.9514
transistor	0.8805	0.7156	0.8559	0.8559	0.8478	0.8795	0.8205	0.5695	0.8317	0.8785
zipper	0.9782	0.8413	0.9774	0.9774	0.9738	0.9803	0.9553	0.3681	0.981	0.9778
mean	0.954	0.79	0.943	0.943	0.943	0.954	0.941	0.641	0.95	0.955

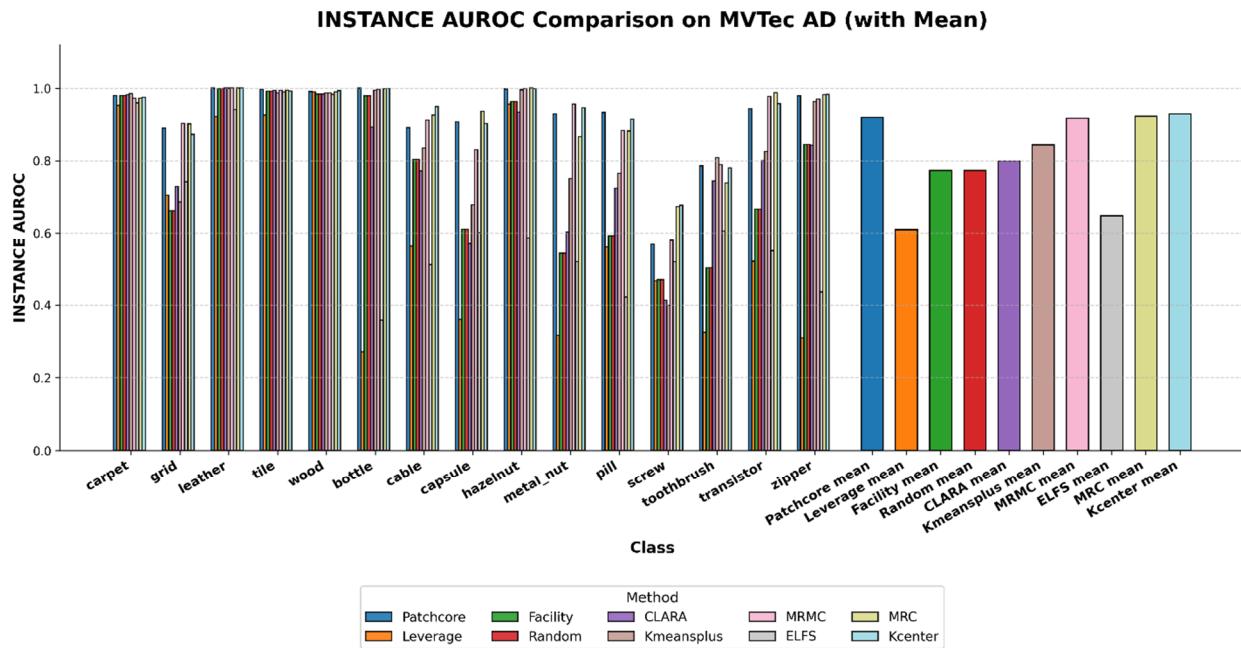
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > MRMC

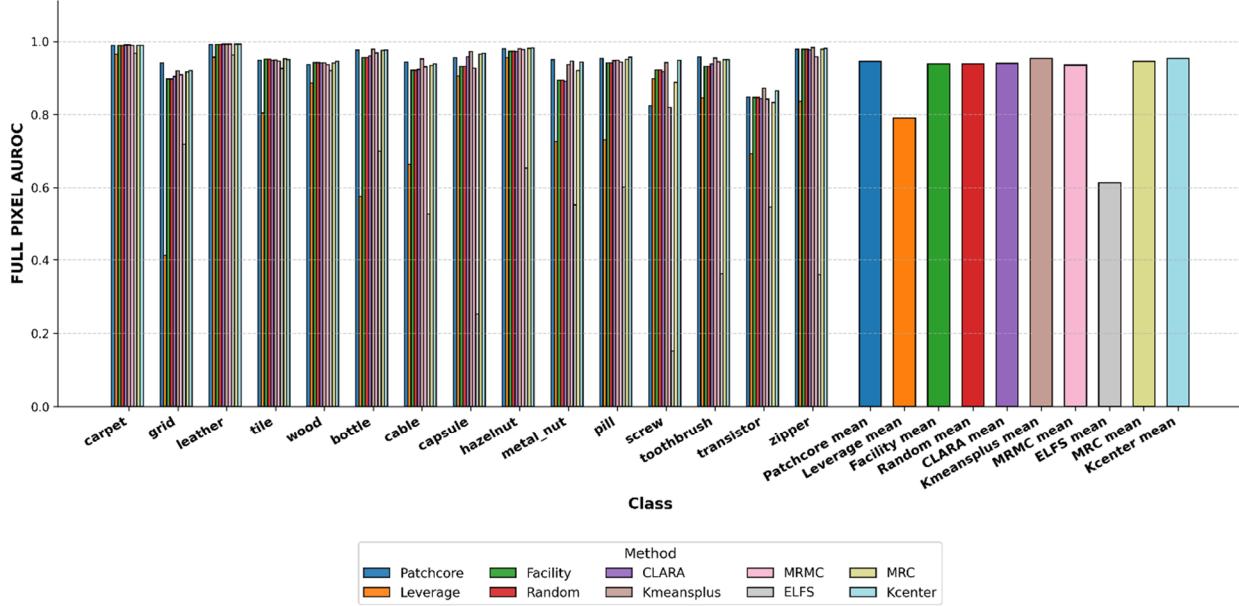
Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	7.0321	7.3455	7.1402	8.1912	14.1471	8.92	6.7308	6.3015	7.019	20.1554
grid	5.6642	5.8464	6.0671	4.4817	10.9958	7.2955	5.5331	4.8348	4.9915	17.3483
leather	5.9385	6.4178	6.5403	5.7471	10.9453	8.5439	6.1438	6.0902	5.9947	15.7783
tile	4.938	5.5101	6.1251	4.3915	10.6745	6.8221	4.5416	4.4833	5.1741	14.4809
wood	6.6505	6.2421	7.0914	5.3452	11.5446	8.2209	5.7678	5.9399	5.742	16.2452
bottle	4.6124	4.4963	5.5024	3.8022	8.0915	5.9247	4.2122	3.9502	4.2161	10.8914
cable	5.5929	6.3926	6.4237	4.9598	10.9378	7.0868	5.5627	5.2383	5.239	12.7615
capsule	5.2565	5.8935	6.006	4.7632	9.8801	6.6299	5.4396	4.8422	4.8045	12.9679
hazelnut	10.5602	10.0385	9.9755	8.206	20.5166	13.6104	9.2777	9.3625	9.2019	34.1576
metal_nut	4.19	5.8593	5.114	4.0756	8.9039	6.5445	4.0624	4.1859	4.1917	26.47
pill	5.7421	5.8881	6.0844	5.645	12.3776	7.5418	5.1296	5.4079	5.8296	24.287
screw	7.0146	6.9478	7.542	6.1318	15.0897	8.7813	6.1427	6.0283	6.0346	23.0475
toothbrush	1.6088	1.7271	2.6512	1.9993	2.5406	2.0651	1.536	1.5207	1.4552	2.0703
transistor	5.5115	5.5515	6.0988	4.8969	9.3243	7.1637	5.064	4.794	4.8995	12.0927
zipper	5.3406	4.9314	5.3905	4.0526	9.8693	7.0563	4.2203	4.4687	4.9112	13.8701
mean	5.71	5.939	6.25	5.113	11.056	7.48	5.291	5.163	5.314	17.108

0.003



Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9799	0.9522	0.9799	0.9799	0.9819	0.9852	0.9723	0.9599	0.9731	0.9755
grid	0.8897	0.7051	0.6625	0.6625	0.7285	0.6867	0.9031	0.7419	0.9014	0.873
leather	1.0000	0.9219	0.9997	0.9997	1.0000	1.0000	1.0000	0.9406	1.0000	1.0000
tile	0.9964	0.926	0.9917	0.9917	0.9942	0.9867	0.9942	0.9895	0.9946	0.9924
wood	0.9912	0.9904	0.9842	0.9842	0.9842	0.9868	0.9868	0.9833	0.9904	0.993
bottle	1.0000	0.2714	0.9794	0.9794	0.8929	0.9944	0.9968	0.3587	0.9984	0.9992
cable	0.8915	0.5622	0.8036	0.8036	0.7719	0.8353	0.9121	0.5112	0.9262	0.949
capsule	0.9075	0.3606	0.6111	0.6111	0.5692	0.6785	0.8305	0.6011	0.9362	0.9023
hazelnut	0.9982	0.9561	0.9636	0.9636	0.9336	0.9954	0.9996	0.5864	1.0000	0.9989
metal_nut	0.9291	0.3172	0.542	0.542	0.6026	0.7502	0.9565	0.52	0.8666	0.9462
pill	0.9332	0.56	0.5922	0.5922	0.7242	0.7654	0.8833	0.422	0.8822	0.9149
screw	0.5677	0.4661	0.4696	0.4696	0.4134	0.3993	0.5782	0.5192	0.6731	0.6768
toothbrush	0.7861	0.325	0.5028	0.5028	0.7444	0.8083	0.7889	0.6056	0.7389	0.7806
transistor	0.9433	0.5208	0.6663	0.6663	0.8	0.8254	0.9775	0.5496	0.9875	0.9571
zipper	0.9793	0.3096	0.8445	0.8445	0.8427	0.9635	0.9709	0.4359	0.9821	0.9827
mean	0.92	0.61	0.773	0.773	0.799	0.844	0.917	0.648	0.923	0.929

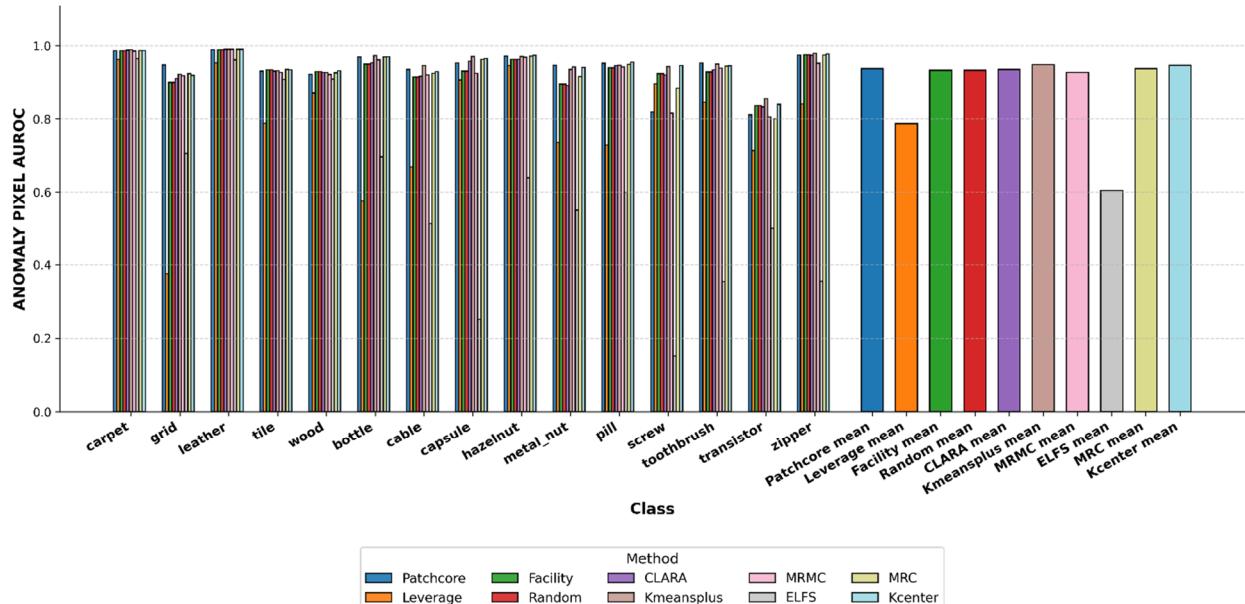
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kmeansplus > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9891	0.9648	0.9889	0.9889	0.99	0.9907	0.9884	0.9679	0.9896	0.9898
grid	0.9412	0.4123	0.8975	0.8975	0.9044	0.92	0.9087	0.7182	0.9163	0.9206
leather	0.9921	0.9571	0.9921	0.9921	0.9924	0.9924	0.9923	0.9633	0.9924	0.9924
tile	0.9481	0.8038	0.9511	0.9511	0.948	0.949	0.9457	0.9259	0.9523	0.9502
wood	0.9371	0.8865	0.9424	0.9424	0.941	0.9412	0.9359	0.9206	0.9404	0.9449
bottle	0.976	0.5733	0.9565	0.9565	0.961	0.979	0.9686	0.6998	0.9754	0.9767
cable	0.9441	0.6637	0.9209	0.9209	0.9239	0.9524	0.9303	0.5251	0.9343	0.9385
capsule	0.9552	0.9057	0.9315	0.9315	0.9585	0.9721	0.9268	0.2527	0.9658	0.968
hazelnut	0.9806	0.9556	0.9731	0.9731	0.9725	0.98	0.9781	0.6529	0.9808	0.9825
metal_nut	0.9499	0.7259	0.8943	0.8943	0.8907	0.9368	0.946	0.5499	0.9208	0.9438
pill	0.9535	0.7308	0.9415	0.9415	0.9478	0.9483	0.9438	0.6008	0.9505	0.9573
screw	0.824	0.8978	0.922	0.922	0.9175	0.9423	0.8198	0.1517	0.8881	0.9481
toothbrush	0.9579	0.8459	0.9311	0.9311	0.9381	0.9548	0.9447	0.3623	0.9503	0.9501
transistor	0.8476	0.6931	0.8463	0.8463	0.8434	0.8725	0.8417	0.5439	0.833	0.865
zipper	0.9786	0.8369	0.9785	0.9785	0.9771	0.9831	0.9582	0.3599	0.979	0.9812
mean	0.945	0.79	0.938	0.938	0.94	0.954	0.935	0.613	0.945	0.954

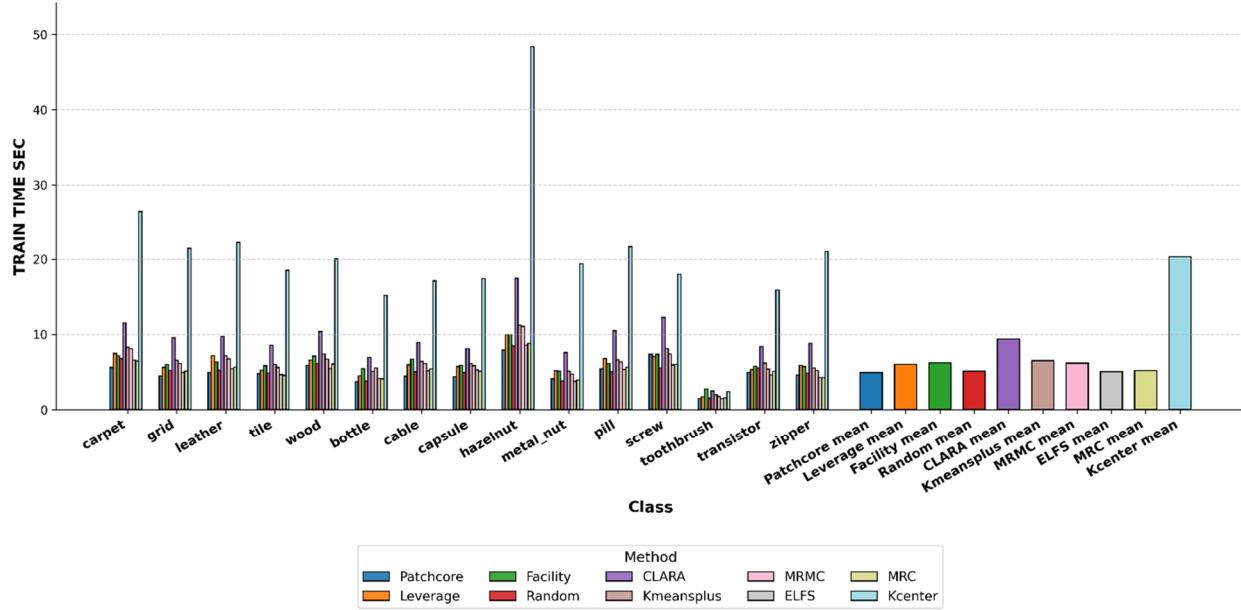
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kmeansplus > Kcenter > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9864	0.962	0.9863	0.9863	0.9875	0.9882	0.9857	0.9645	0.987	0.9873
grid	0.9475	0.3751	0.8997	0.8997	0.91	0.9217	0.918	0.7057	0.9234	0.9186
leather	0.9893	0.954	0.9893	0.9893	0.9898	0.9897	0.9897	0.9611	0.9898	0.9898
tile	0.9305	0.7877	0.9341	0.9341	0.9306	0.9316	0.9275	0.9083	0.9351	0.934
wood	0.9222	0.8706	0.9286	0.9286	0.9262	0.9264	0.9209	0.909	0.9255	0.9309
bottle	0.9693	0.5734	0.9495	0.9495	0.954	0.9728	0.9612	0.6962	0.9688	0.9702
cable	0.9348	0.6684	0.9145	0.9145	0.9164	0.946	0.92	0.5124	0.9244	0.9289
capsule	0.953	0.9066	0.9302	0.9302	0.9574	0.9705	0.9244	0.251	0.9632	0.9656
hazelnut	0.9714	0.9459	0.9628	0.9628	0.9633	0.9707	0.9686	0.6394	0.9715	0.9734
metal_nut	0.9465	0.7356	0.8947	0.8947	0.8909	0.9349	0.9418	0.5487	0.916	0.9406
pill	0.9518	0.729	0.9399	0.9399	0.9462	0.9466	0.942	0.5996	0.9488	0.9555
screw	0.8185	0.896	0.9236	0.9236	0.9192	0.9425	0.8157	0.1515	0.8839	0.9459
toothbrush	0.9529	0.8456	0.9278	0.9278	0.9342	0.9495	0.939	0.354	0.9442	0.9449
transistor	0.8109	0.7133	0.8368	0.8368	0.833	0.8549	0.8053	0.4986	0.8001	0.8398
zipper	0.9742	0.8415	0.9752	0.9752	0.9737	0.9793	0.9524	0.355	0.9747	0.9775
mean	0.937	0.787	0.933	0.933	0.935	0.948	0.927	0.604	0.937	0.947

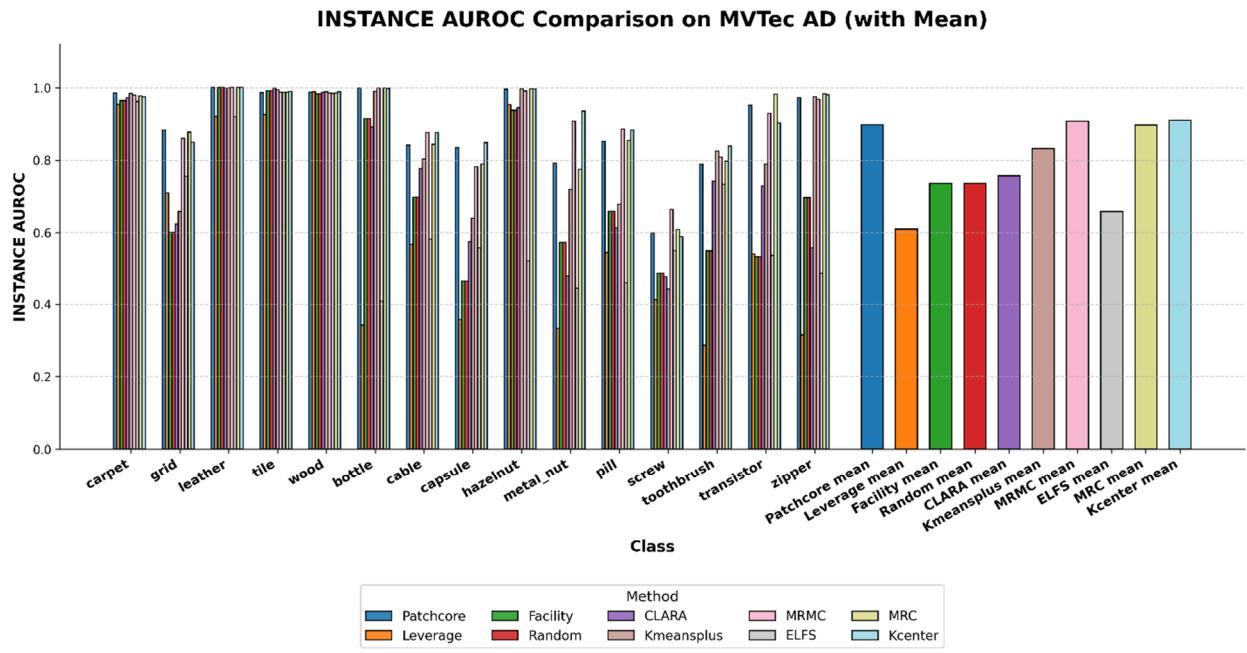
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Patchcore > ELFS > Random

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	5.6107	7.4618	7.1496	6.7649	11.5068	8.2975	8.0873	6.5799	6.4488	26.3238
grid	4.4606	5.5949	5.9859	5.18	9.5369	6.5421	6.1382	4.9398	5.0935	21.4216
leather	4.9206	7.1639	6.3091	5.2238	9.7215	7.148	6.7489	5.4268	5.6305	22.2303
tile	4.7837	5.2344	5.8429	4.8409	8.5446	6.0067	5.6047	4.6594	4.5407	18.519
wood	5.8967	6.5732	7.1005	6.1291	10.3764	7.3993	6.7121	5.4463	6.0599	20.0183
bottle	3.7075	4.4872	5.4575	3.8309	6.9115	5.0606	5.5158	4.1341	4.0946	15.1776
cable	4.4451	5.9615	6.6958	5.054	8.919	6.4066	6.1441	5.1633	5.4156	17.1113
capsule	4.3896	5.7234	5.9182	4.9366	8.0937	6.0883	5.8283	5.2739	5.1115	17.4237
hazelnut	7.9188	9.9458	9.9496	8.4955	17.4598	11.1913	11.0574	8.538	8.8111	48.3722
metal_nut	4.0702	5.1623	5.0932	3.8296	7.5865	5.1048	4.7348	3.7479	3.9242	19.3846
pill	5.4608	6.788	6.0961	5.0251	10.4978	6.6186	6.3068	5.3345	5.65	21.6367
screw	7.3547	7.0682	7.3463	5.5338	12.2152	8.1187	7.3704	5.9455	6.0177	17.9654
toothbrush	1.4399	1.6885	2.7343	1.5281	2.4421	1.9689	1.7479	1.4237	1.5564	2.4026
transistor	4.9098	5.3479	5.7396	5.5424	8.3592	6.1573	5.3874	4.6167	5.0856	15.9006
zipper	4.6184	5.8599	5.7321	4.8575	8.8196	5.5376	5.1983	4.2453	4.26	20.9963
mean	4.932	6.004	6.21	5.118	9.399	6.51	6.172	5.032	5.18	20.326

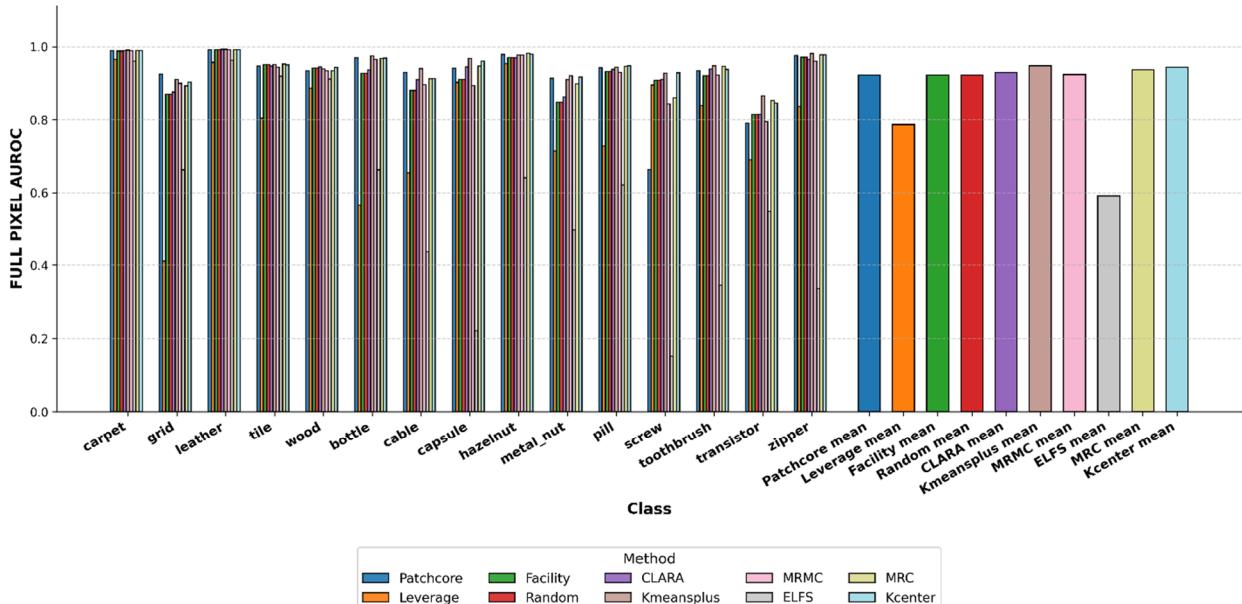
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Top-3 methods by mean INSTANCE AUROC: Kcenter > MRMC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9852	0.9539	0.9639	0.9639	0.9719	0.9839	0.9795	0.9619	0.9775	0.9747
grid	0.883	0.7101	0.6007	0.6007	0.6241	0.6583	0.8605	0.7552	0.8772	0.8496
leather	1	0.9202	1	1	0.9997	0.9997	1	0.9198	1	1
tile	0.9863	0.926	0.9913	0.9913	0.9989	0.9942	0.9877	0.987	0.9881	0.9895
wood	0.9877	0.9886	0.9833	0.9833	0.9877	0.9886	0.9851	0.9842	0.9851	0.9886
bottle	0.9992	0.3421	0.9143	0.9143	0.8913	0.9897	0.9992	0.4087	0.9992	0.9976
cable	0.8415	0.5648	0.6981	0.6981	0.7772	0.803	0.8763	0.5795	0.8435	0.8765
capsule	0.8341	0.3578	0.4643	0.4643	0.5728	0.6406	0.7818	0.5552	0.7898	0.8484
hazelnut	0.9957	0.9536	0.9375	0.9375	0.9443	0.9971	0.9907	0.5189	0.9961	0.9964
metal_nut	0.7918	0.3333	0.5704	0.5704	0.478	0.719	0.9081	0.4438	0.7747	0.9355
pill	0.8522	0.542	0.6588	0.6588	0.6137	0.6784	0.886	0.4594	0.8543	0.8838
screw	0.5995	0.4128	0.4856	0.4856	0.4757	0.4417	0.6641	0.5481	0.6089	0.5886
toothbrush	0.7889	0.2861	0.5472	0.5472	0.7417	0.825	0.8083	0.7333	0.7972	0.8389
transistor	0.9517	0.5387	0.5308	0.5308	0.7296	0.7896	0.9288	0.5342	0.9821	0.9033
zipper	0.9732	0.3154	0.6962	0.6962	0.5557	0.9753	0.9682	0.4853	0.9827	0.9803
mean	0.898	0.61	0.736	0.736	0.757	0.832	0.908	0.658	0.897	0.91

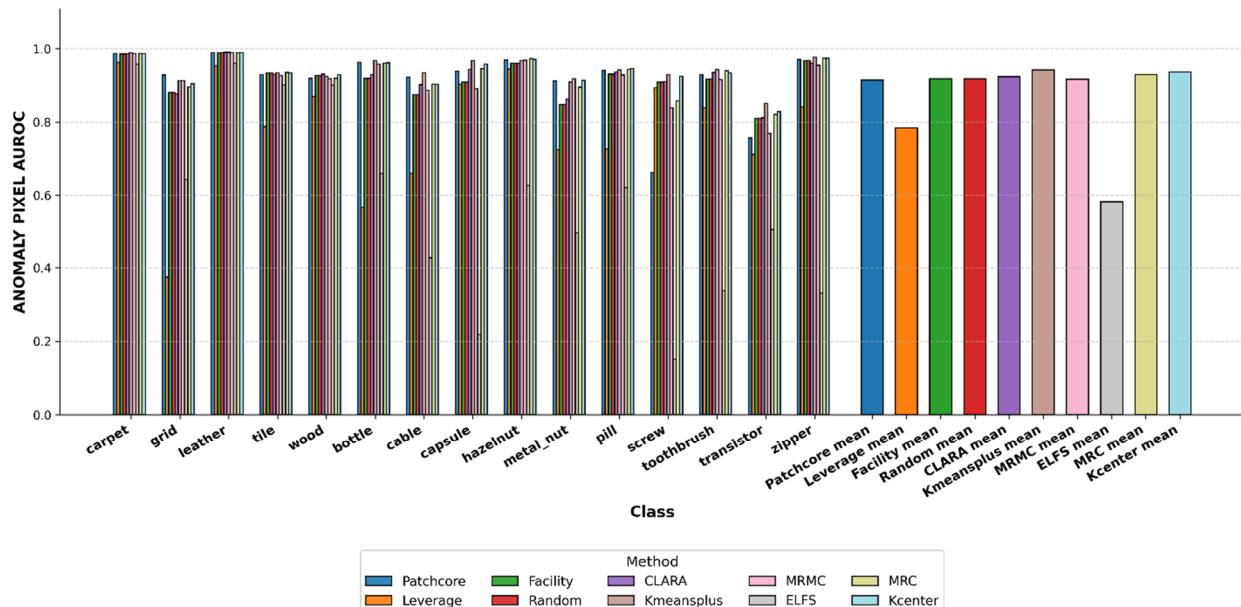
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kmeansplus > Kcenter > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9894	0.9651	0.9881	0.9881	0.9897	0.9908	0.9892	0.9606	0.9895	0.9897
grid	0.9251	0.4112	0.8702	0.8702	0.8752	0.9104	0.8994	0.6624	0.893	0.9031
leather	0.9922	0.9571	0.9922	0.9922	0.9926	0.9925	0.9924	0.9624	0.9924	0.9923
tile	0.947	0.8037	0.9507	0.9507	0.9473	0.9507	0.9441	0.9187	0.9524	0.9498
wood	0.9337	0.8864	0.9413	0.9413	0.9444	0.9395	0.9336	0.9112	0.9336	0.9435
bottle	0.9696	0.5636	0.927	0.927	0.9363	0.9747	0.965	0.6625	0.9681	0.9684
cable	0.9302	0.6549	0.8803	0.8803	0.9099	0.9403	0.8956	0.4363	0.9119	0.9127
capsule	0.9405	0.9016	0.9103	0.9103	0.9447	0.9683	0.8934	0.2204	0.9473	0.961
hazelnut	0.9785	0.9541	0.9705	0.9705	0.9693	0.9774	0.9774	0.6412	0.9823	0.98
metal_nut	0.9137	0.7149	0.8473	0.8473	0.8624	0.9101	0.9209	0.496	0.8977	0.917
pill	0.942	0.7278	0.9319	0.9319	0.9375	0.9441	0.9302	0.6214	0.946	0.9481
screw	0.6638	0.8947	0.9083	0.9083	0.9103	0.9279	0.8433	0.1518	0.8602	0.928
toothbrush	0.9342	0.839	0.9207	0.9207	0.939	0.9481	0.922	0.345	0.9462	0.9375
transistor	0.791	0.6903	0.8141	0.8141	0.8153	0.8657	0.7949	0.5467	0.8525	0.8454
zipper	0.9754	0.8365	0.9711	0.9711	0.9646	0.9809	0.96	0.3353	0.9783	0.978
mean	0.922	0.787	0.922	0.922	0.929	0.948	0.924	0.591	0.937	0.944

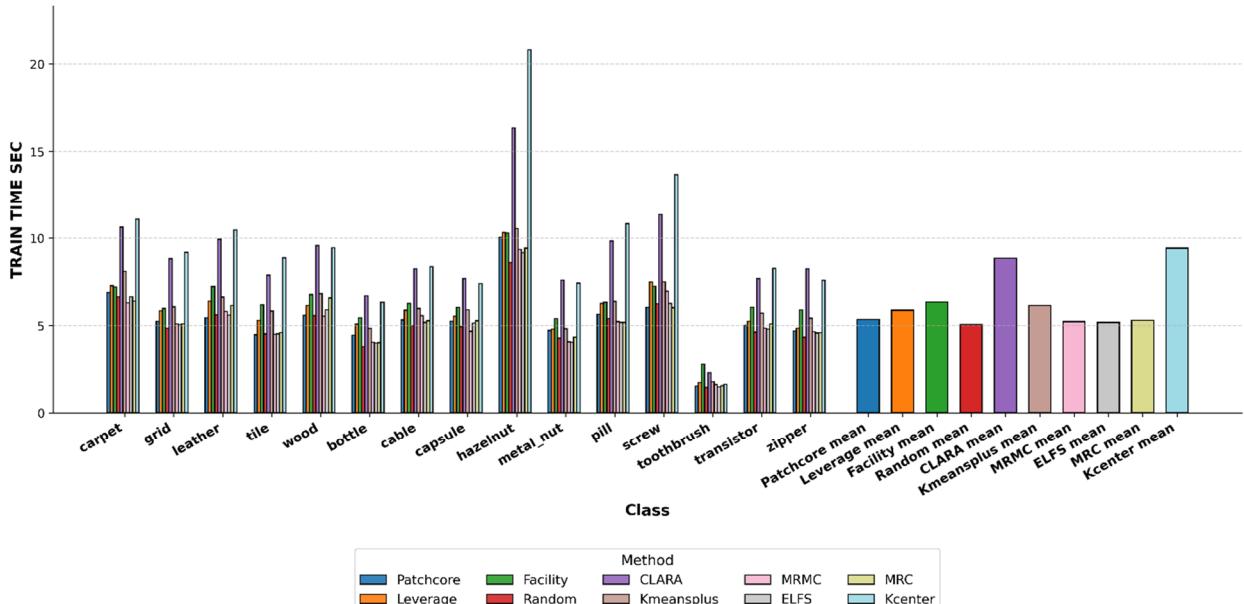
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kmeansplus > Kcenter > MRC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9868	0.9623	0.9855	0.9855	0.9872	0.9884	0.9865	0.9576	0.9869	0.9872
grid	0.9286	0.3744	0.8804	0.8804	0.8765	0.913	0.9128	0.6435	0.8954	0.904
leather	0.9895	0.954	0.9895	0.9895	0.99	0.9899	0.9898	0.9598	0.9898	0.9896
tile	0.9294	0.7876	0.9338	0.9338	0.9298	0.9336	0.9266	0.9014	0.9356	0.9336
wood	0.9187	0.8704	0.9273	0.9273	0.9302	0.9242	0.9181	0.9	0.9191	0.9293
bottle	0.9628	0.5639	0.9193	0.9193	0.93	0.9681	0.9575	0.6591	0.9611	0.9612
cable	0.9229	0.6598	0.8747	0.8747	0.9023	0.9345	0.8865	0.4272	0.9038	0.9038
capsule	0.9382	0.9026	0.9091	0.9091	0.9436	0.9669	0.8913	0.2188	0.9451	0.9587
hazelnut	0.9694	0.9443	0.9607	0.9607	0.9598	0.9676	0.9683	0.6267	0.9735	0.9708
metal_nut	0.9117	0.7247	0.8479	0.8479	0.8631	0.9089	0.9179	0.495	0.8951	0.9135
pill	0.9404	0.7261	0.9303	0.9303	0.9362	0.9424	0.9286	0.6203	0.9441	0.9463
screw	0.6621	0.8933	0.9092	0.9092	0.9102	0.9287	0.8389	0.1509	0.8575	0.9255
toothbrush	0.9291	0.8392	0.9174	0.9174	0.9351	0.9428	0.9157	0.3378	0.9402	0.9333
transistor	0.756	0.7112	0.8096	0.8096	0.8114	0.8505	0.769	0.5033	0.8207	0.8281
zipper	0.9708	0.8413	0.9679	0.9679	0.9611	0.9769	0.9544	0.3309	0.9741	0.9739
mean	0.914	0.784	0.918	0.918	0.924	0.942	0.917	0.582	0.929	0.937

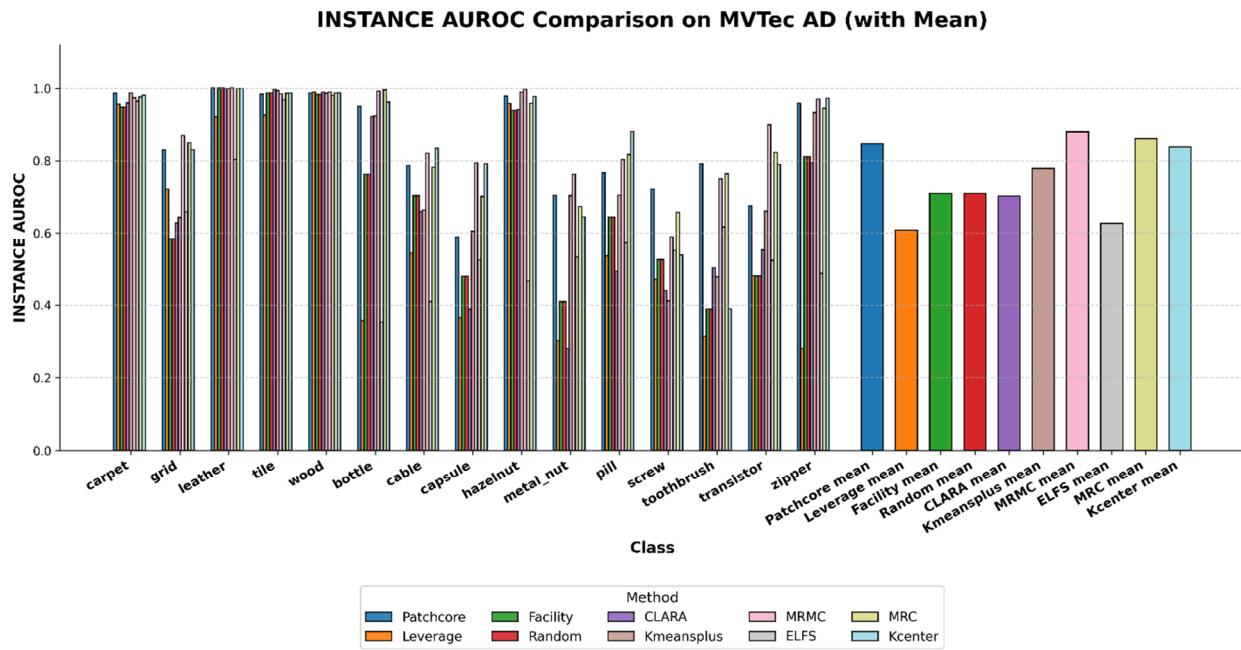
TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: Random > ELFS > MRMC

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	6.8708	7.2658	7.2075	6.6245	10.621	8.0975	6.29	6.6413	6.3866	11.0791
grid	5.2297	5.8361	5.9607	4.8419	8.805	6.0522	5.0885	5.0268	5.0861	9.1782
leather	5.4168	6.3865	7.2217	5.5997	9.9228	6.6057	5.803	5.5927	6.1395	10.4598
tile	4.471	5.2718	6.178	4.5106	7.8685	5.8126	4.4881	4.5139	4.5941	8.8624
wood	5.5656	6.1464	6.7538	5.5538	9.556	6.8132	5.521	5.9038	6.5594	9.4251
bottle	4.4296	5.0709	5.4224	3.7743	6.6967	4.8154	4.0194	3.9855	4.0099	6.3244
cable	5.3154	5.8575	6.2529	4.9859	8.2213	5.9542	5.56	5.1613	5.2579	8.3632
capsule	5.2529	5.5241	6.02	4.9275	7.6767	5.9011	4.6609	5.1234	5.2635	7.3849
hazelnut	10.0376	10.3105	10.2823	8.6083	16.3334	10.5335	9.3307	9.1538	9.4181	20.8127
metal_nut	4.7025	4.7935	5.3963	4.2623	7.5923	4.8093	4.0602	4.0273	4.3171	7.4173
pill	5.6311	6.2526	6.3214	5.3906	9.8236	6.3687	5.2144	5.164	5.1616	10.8142
screw	6.0219	7.4822	7.231	6.2334	11.3519	7.4959	6.9634	6.2536	6.012	13.6649
toothbrush	1.5245	1.7298	2.7928	1.4537	2.296	1.7793	1.6062	1.4871	1.552	1.6284
transistor	4.9975	5.2352	6.0473	4.6053	7.6666	5.706	4.833	4.7882	5.0835	8.2578
zipper	4.68	4.8349	5.8793	4.3134	8.2236	5.4095	4.6302	4.5587	4.5775	7.5702
mean	5.343	5.867	6.331	5.046	8.844	6.144	5.205	5.159	5.295	9.416

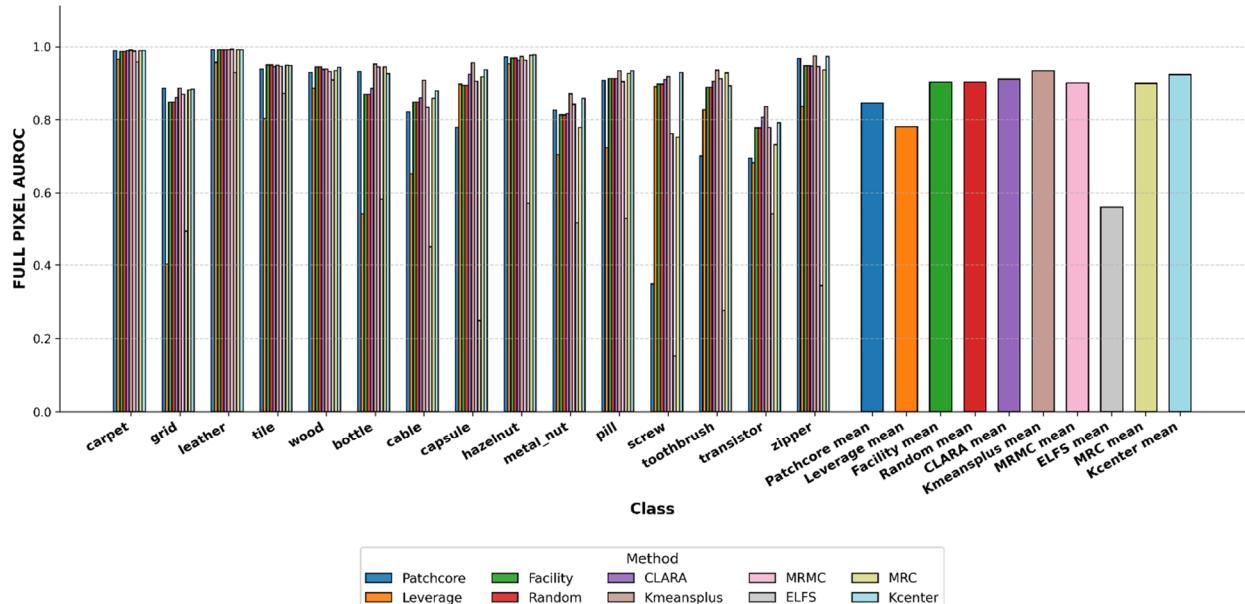
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Top-3 methods by mean INSTANCE AUROC: MRMC > MRC > Patchcore

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.986	0.9567	0.9482	0.9482	0.9599	0.9868	0.9735	0.9643	0.9763	0.9803
grid	0.8296	0.7218	0.5831	0.5831	0.6282	0.6433	0.8697	0.6591	0.8496	0.8304
leather	1	0.9215	1	1	0.9997	0.9997	1	0.803	0.9997	0.9997
tile	0.9841	0.9257	0.987	0.987	0.9968	0.9931	0.9848	0.9672	0.9859	0.987
wood	0.9868	0.9895	0.9833	0.9833	0.9895	0.986	0.9895	0.9798	0.9868	0.9877
bottle	0.95	0.3571	0.7627	0.7627	0.9222	0.9238	0.9921	0.3532	0.9952	0.9619
cable	0.7864	0.5435	0.7035	0.7035	0.6599	0.664	0.8207	0.4097	0.7822	0.8341
capsule	0.5884	0.3658	0.4787	0.4787	0.3885	0.6051	0.7938	0.5241	0.7012	0.7922
hazelnut	0.9786	0.9582	0.9393	0.9393	0.9407	0.9896	0.9968	0.4664	0.9579	0.9775
metal_nut	0.7043	0.3021	0.4096	0.4096	0.2805	0.7038	0.762	0.5323	0.6735	0.6452
pill	0.7668	0.5355	0.6446	0.6446	0.4929	0.7049	0.8031	0.5715	0.8172	0.8808
screw	0.7217	0.47	0.5251	0.5251	0.4398	0.412	0.5893	0.5501	0.6577	0.5374
toothbrush	0.7917	0.3139	0.3889	0.3889	0.5028	0.4778	0.75	0.6167	0.7639	0.3889
transistor	0.6754	0.4804	0.48	0.48	0.5517	0.6608	0.8992	0.5229	0.8229	0.7888
zipper	0.9588	0.281	0.8117	0.8117	0.7939	0.933	0.9709	0.4866	0.9446	0.9722
mean	0.847	0.608	0.71	0.71	0.703	0.779	0.88	0.627	0.861	0.838

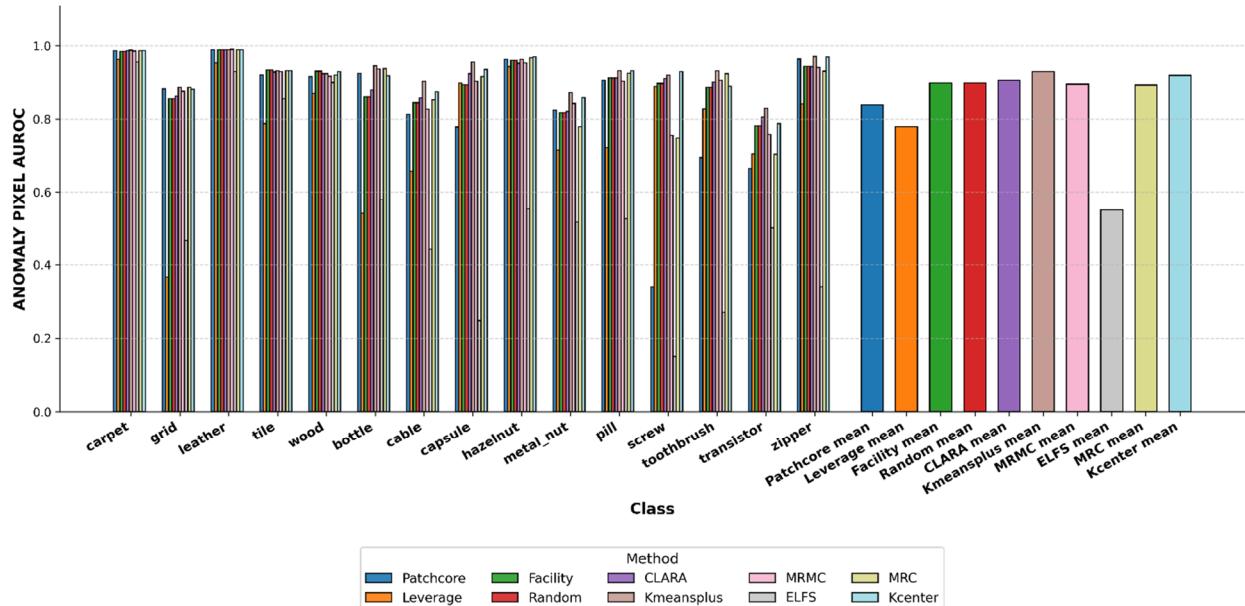
FULL PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean FULL PIXEL AUROC: Kmeansplus > Kcenter > CLARA

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9888	0.9656	0.9875	0.9875	0.9895	0.9905	0.9879	0.9587	0.9893	0.9896
grid	0.8861	0.4022	0.8486	0.8486	0.861	0.8861	0.8701	0.4929	0.8819	0.8834
leather	0.9921	0.9572	0.9923	0.9923	0.9924	0.9924	0.9926	0.9288	0.9923	0.992
tile	0.9388	0.8034	0.9499	0.9499	0.9458	0.9491	0.946	0.8717	0.949	0.9483
wood	0.9295	0.8862	0.9447	0.9447	0.9377	0.9387	0.9324	0.9087	0.9344	0.9436
bottle	0.9321	0.5397	0.8695	0.8695	0.8856	0.9524	0.9443	0.5828	0.9447	0.926
cable	0.822	0.6521	0.8485	0.8485	0.86	0.9082	0.8346	0.45	0.8588	0.8798
capsule	0.7794	0.8975	0.8938	0.8938	0.9244	0.9564	0.9047	0.2488	0.9176	0.9373
hazelnut	0.9719	0.9529	0.9688	0.9688	0.9625	0.9734	0.9635	0.5686	0.9762	0.9784
metal_nut	0.8267	0.7046	0.8135	0.8135	0.817	0.8706	0.8425	0.5152	0.7785	0.8586
pill	0.9074	0.7234	0.9125	0.9125	0.9129	0.9338	0.9045	0.5273	0.9265	0.934
screw	0.349	0.8901	0.8974	0.8974	0.9095	0.9185	0.7618	0.1524	0.752	0.9293
toothbrush	0.7008	0.8274	0.8888	0.8888	0.9052	0.9356	0.9119	0.2763	0.928	0.8923
transistor	0.6945	0.6822	0.7777	0.7777	0.8074	0.836	0.7785	0.54	0.7315	0.7917
zipper	0.9677	0.8365	0.9477	0.9477	0.9469	0.9747	0.9454	0.3441	0.9364	0.9733
mean	0.846	0.781	0.903	0.903	0.911	0.934	0.901	0.558	0.9	0.924

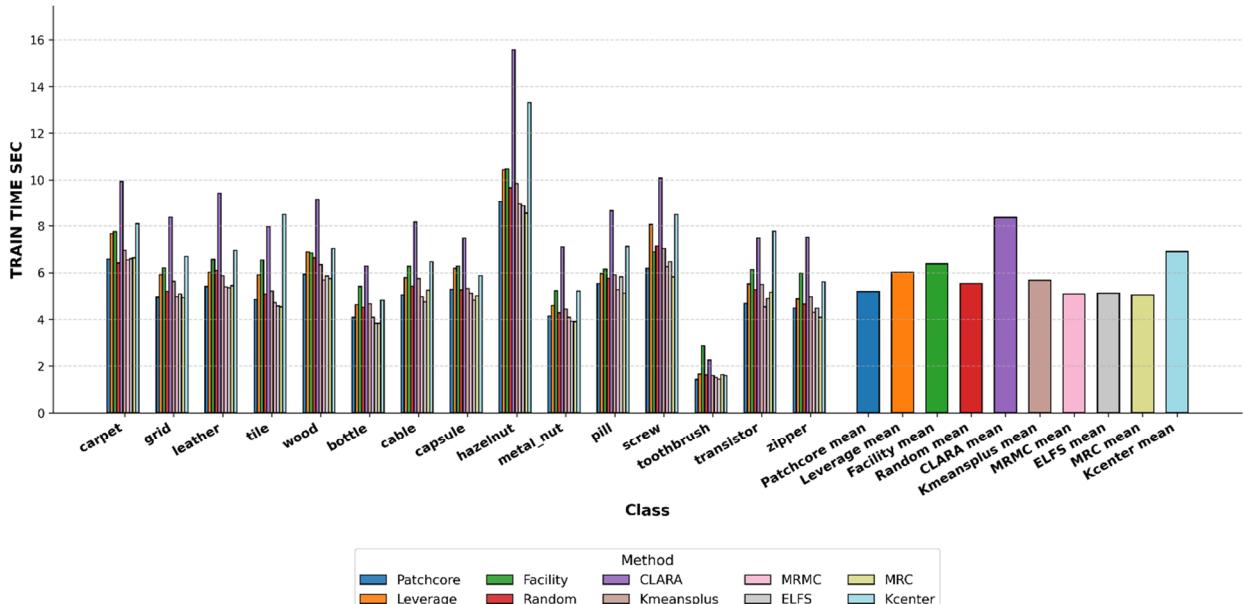
ANOMALY PIXEL AUROC Comparison on MVTec AD (with Mean)



Top-3 methods by mean ANOMALY PIXEL AUROC: Kmeansplus > Kcenter > CLARA

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	0.9862	0.9628	0.985	0.985	0.987	0.988	0.9853	0.9558	0.9867	0.9871
grid	0.8824	0.3662	0.8551	0.8551	0.8622	0.8866	0.8756	0.4656	0.8864	0.8812
leather	0.9894	0.9542	0.9896	0.9896	0.9897	0.9897	0.99	0.9301	0.9896	0.9892
tile	0.9207	0.7875	0.9333	0.9333	0.9283	0.9317	0.9288	0.8551	0.9321	0.9321
wood	0.9157	0.8702	0.9309	0.9309	0.9233	0.9237	0.9167	0.8999	0.9201	0.9293
bottle	0.9244	0.541	0.861	0.861	0.8794	0.9452	0.937	0.5788	0.9375	0.9183
cable	0.8128	0.6574	0.8445	0.8445	0.8578	0.9026	0.8269	0.4424	0.852	0.8738
capsule	0.7776	0.8985	0.8931	0.8931	0.9238	0.955	0.903	0.2476	0.9156	0.9355
hazelnut	0.963	0.9433	0.9603	0.9603	0.9524	0.9633	0.9534	0.5527	0.967	0.97
metal_nut	0.8245	0.7149	0.8168	0.8168	0.8202	0.8721	0.8426	0.5158	0.7785	0.8587
pill	0.9059	0.7219	0.9118	0.9118	0.9122	0.9324	0.9032	0.5257	0.925	0.9323
screw	0.3394	0.8889	0.8975	0.8975	0.9101	0.92	0.7555	0.1503	0.7478	0.9287
toothbrush	0.6939	0.8277	0.8861	0.8861	0.9015	0.9317	0.906	0.2702	0.9237	0.8896
transistor	0.6645	0.7045	0.7808	0.7808	0.806	0.8293	0.7581	0.5007	0.7039	0.7873
zipper	0.9636	0.8413	0.9437	0.9437	0.9426	0.9708	0.9405	0.34	0.9309	0.9695
mean	0.838	0.779	0.899	0.899	0.906	0.929	0.895	0.549	0.893	0.919

TRAIN TIME SEC Comparison on MVTec AD (with Mean)



Top-3 methods by mean TRAIN TIME SEC: MRC > MRMC > ELFS

Class	Patchcore	Leverage	Facility	Random	CLARA	Kmeansplus	MRMC	ELFS	MRC	Kcenter
carpet	6.5831	7.6713	7.7458	6.4123	9.9324	6.9637	6.5388	6.5933	6.6285	8.0965
grid	4.9487	5.9101	6.2062	5.1918	8.3715	5.621	4.9578	5.0765	4.9277	6.6862
leather	5.3979	6.0007	6.5548	6.0953	9.4355	5.8646	5.3835	5.3478	5.4359	6.9414
tile	4.8479	5.9004	6.5382	5.0642	7.9704	5.2042	4.7212	4.569	4.5387	8.4898
wood	5.9267	6.8871	6.8405	6.6324	9.1597	6.3316	5.6832	5.8439	5.7409	7.0276
bottle	4.0873	4.632	5.3979	4.5251	6.2707	4.6637	4.079	3.8231	3.8243	4.8264
cable	5.046	5.7759	6.2694	5.4081	8.1696	5.7427	4.9731	4.7576	5.235	6.4644
capsule	5.2803	6.1781	6.2824	5.2546	7.4732	5.314	5.1022	4.8224	5.0018	5.8586
hazelnut	9.0467	10.4422	10.4832	9.6651	15.5712	9.8504	8.9401	8.8572	8.54	13.3035
metal_nut	4.1452	4.597	5.2129	4.2719	7.0935	4.4332	4.077	3.9102	3.9051	5.2079
pill	5.5389	5.9561	6.1475	5.7533	8.6561	5.9035	5.2624	5.8174	5.1193	7.116
screw	6.1837	8.0505	6.8832	7.1262	10.0825	7.0338	6.2477	6.4559	5.8081	8.4967
toothbrush	1.4218	1.6567	2.873	1.6159	2.2587	1.5983	1.5096	1.4337	1.6277	1.5953
transistor	4.6822	5.5048	6.1294	5.2655	7.4783	5.4825	4.5381	4.9017	5.1554	7.7603
zipper	4.4903	4.8785	5.9777	4.6533	7.5097	4.9588	4.307	4.471	4.0807	5.608
mean	5.175	6.003	6.369	5.529	8.362	5.664	5.088	5.112	5.038	6.899

Conclusion

In this paper, we investigate ten representative methods, including K-Medoids Sampler, CLARA, KMeans++ Sampler, Leverage Score Sampling, the Determinantal Point Process (DPP), K-Center Greedy Sampler, Minimum Redundancy Constraint Sampler, Maximum Contribution Sampler, ELFScoresampler, and PatchCore.

Leverage score sampling [1] is a coresset selection strategy that identifies representative samples based on their influence on the low-dimensional structure of the data. Each data point is assigned a sampling probability proportional to its statistical leverage score, which quantifies its contribution to the column space of the feature matrix. In practice, leverage scores are efficiently approximated using low-rank matrix decompositions, such as randomized singular value decomposition, by computing the squared ℓ_2 -norms of the rows of the resulting orthonormal basis. Sampling according to these probabilities preserves the geometric and statistical properties of the original dataset while substantially reducing computational cost. This formulation aligns with the algorithmic leveraging framework and its statistical interpretation, as analyzed in *A Statistical Perspective on Algorithmic Leveraging*.

k-Determinantal Point Processes (k-DPPs) [2] are probabilistic subset selection methods that explicitly encourage diversity among selected samples. The key idea is to model similarity between data points using a kernel matrix and to favor subsets whose elements are both informative and mutually dissimilar. Subsets containing redundant or highly similar samples are assigned lower probability, while diverse and representative subsets are more likely to be selected. The k-DPP variant further constrains the selection to exactly k elements, making it particularly suitable for tasks that require a fixed-size representative subset. By balancing representativeness and diversity in a principled probabilistic framework, k-DPPs have been widely adopted for coresset construction, data summarization, and sample selection in large-scale machine learning systems.

CLARA (Clustering Large Applications) [3] is a sampling-based extension of medoid-based clustering methods designed to scale clustering to large datasets. Instead of applying k-medoids clustering to the entire dataset, which is computationally prohibitive for large-scale problems, CLARA repeatedly draws small random subsets of the data and applies a medoid-based clustering algorithm to each subset to obtain candidate sets of medoids. These candidate medoids are then evaluated on the full dataset by assigning each data point to its nearest medoid and computing the overall clustering cost. The solution with the lowest cost across all samples is selected as the final clustering result. By restricting expensive medoid optimization to small subsets while still assessing quality on the complete dataset, CLARA provides an efficient approximation of k-medoids and is well suited for representative data selection and large-scale clustering tasks.

KMeans++-based sampling [4] is a clustering-informed approach for selecting a representative subset of data, leveraging the improved initialization strategy of k-means++ to ensure well-spread cluster centers. In practice, a small random subset of the dataset can be drawn initially to reduce computational cost, and MiniBatchKMeans is then applied with k-means++ seeding to

efficiently identify cluster centers. The number of clusters is chosen according to the desired size of the subset, ensuring that the final selection reflects the overall data distribution. Once the centers are determined, the closest actual data points to each cluster center in the full dataset are selected, producing a subset that preserves both diversity and representativeness. This strategy provides an effective mechanism for coresset construction, data summarization, and accelerating large-scale learning tasks, combining the statistical advantages of k-means++ initialization with practical efficiency.

The **Minimum Redundancy Constraint (MRC) sampler** [5] is a subset selection strategy designed for large feature spaces that prioritizes diversity and minimizes redundancy among the selected features. Inspired by the dictionary-based sparse representation framework used in unsupervised surface defect detection, this approach iteratively selects features or samples that contribute unique information while avoiding overlap with previously chosen elements. By enforcing a minimum redundancy criterion, the MRC sampler produces a representative and compact subset, enabling efficient and scalable processing of high-dimensional data. This method is particularly well suited for applications requiring coresset selection, data summarization, or reduction of computational load in large-scale unsupervised learning tasks.

The **K-Center Greedy sampler** [6] is a diversity-driven subset selection method designed to construct a representative coresset by maximizing coverage of the feature space. Inspired by the principle of clustering to minimize the maximum intercluster distance, the algorithm iteratively selects samples that are farthest from the set of already chosen points, thereby ensuring that each new selection contributes maximally to the diversity of the subset. This greedy strategy effectively spreads the selected points across the data distribution, producing a compact yet representative subset that preserves the geometric structure of the original dataset. The approach is particularly suitable for coresset selection, data summarization, and large-scale learning tasks where broad coverage and minimal redundancy are critical.

The approach presented in “**Towards Total Recall in Industrial Anomaly Detection**” [7] focuses on maximizing the detection of rare and diverse anomalies in industrial settings. To achieve this, the method emphasizes the selection of a representative subset of normal data that effectively captures the variability of the non-anomalous distribution. By constructing a comprehensive and diverse reference set, the system is better able to identify deviations and outliers in new samples. The framework combines principles of diversity-based sampling and feature-space coverage to ensure that the model retains sensitivity to a wide range of potential anomalies. This strategy is particularly relevant for coresset construction, unsupervised anomaly detection, and industrial applications where recall is critical, and missing rare defects can have significant consequences.

Our Approximate ELFSCoresetSampler [8] selects a representative and robust subset of features without requiring labels. Each feature is evaluated according to three complementary criteria: **representativeness**, measured as the distance from the mean of all features; **density**, estimated approximately via distances to a subset of reference points to capture local concentration; and **instability**, quantifying the sensitivity of features to small random perturbations. The scores are normalized and combined into a composite metric, from which candidate features are identified. To ensure diversity and broad coverage of the feature space, a **k-center greedy selection** is

applied on this candidate pool, resulting in a final subsample that balances representativeness, local density, robustness to noise, and computational efficiency.

Facility Location is a submodular function maximization approach that aims to select a representative subset of samples by maximizing coverage of the entire dataset while minimizing redundancy among selected points. The method assigns higher importance to samples that are similar to many others, ensuring that each data point in the dataset is well represented by at least one selected element. Due to the diminishing returns property of submodular functions, adding a new sample provides less benefit when similar samples are already selected, naturally encouraging diversity. The optimization can be efficiently approximated using a greedy strategy with theoretical performance guarantees, making Facility Location particularly suitable for scalable coresset selection, data summarization, and large-scale learning scenarios.

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