Table 1: AUC on individual datasets. Positive improvements on AE are in bold.

	Dataset	EntropyAE	VanillaAE	Improvement
1	ALOI	0.567	0.552	**0.015**
2	annthyroid	0.691	0.725	-0.034
3	backdoor	0.910	0.910	0.000
4	breastw	0.928	0.891	**0.037**
5	campaign	0.738	0.747	-0.009
6	cardio	0.949	0.802	**0.148**
7	Cardiotocography	0.683	0.542	**0.140**
8	celeba	0.784	0.792	-0.008
9	census	0.677	0.682	-0.006
10	cover	0.898	0.896	**0.002**
11	donors	0.726	0.801	-0.075
12	fault	0.616	0.654	-0.038
13	fraud	0.951	0.949	**0.002**
14	glass	0.707	0.788	-0.081
15	Hepatitis	0.747	0.651	**0.096**
16	http	0.995	0.991	**0.005**
17	InternetAds	0.615	0.564	**0.051**
18	Ionosphere	0.927	0.918	**0.008**
19	landsat	0.543	0.484	**0.059**
20	letter	0.846	0.871	-0.025
21	Lymphography	0.996	0.972	**0.025**
22	magic	0.667	0.754	-0.086
23	mammography	0.866	0.775	**0.091**
24	mnist	0.842	0.819	**0.023**
25	musk	0.998	0.994	**0.004**
26	optdigits	0.531	0.445	**0.086**
27	PageBlocks	0.915	0.893	**0.021**
28	pendigits	0.819	0.801	**0.018**
29	Pima	0.640	0.594	**0.046**
30	satellite	0.624	0.638	-0.014
31	satimage-2	0.971	0.952	**0.019**
32	shuttle	0.987	0.935	**0.053**
33	skin	0.691	0.503	**0.188**
34	smtp	0.887	0.905	-0.018
35	SpamBase	0.550	0.528	**0.022**
36	speech	0.477	0.497	-0.020
37	Stamps	0.905	0.775	**0.129**
38	thyroid	0.934	0.913	**0.021**
39	vertebral	0.385	0.461	-0.076
40	vowels	0.878	0.872	**0.007**
41	Waveform	0.638	0.622	**0.016**
42	WBC	0.993	0.948	**0.045**
43	WDBC	0.986	0.930	**0.056**
44	Wilt	0.769	0.659	**0.109**
45	wine	0.807	0.608	**0.199**
46	WPBC	0.481	0.494	-0.013
47	yeast	0.401	0.431	-0.030