

FairFace: Face Attribute Dataset for Balanced Race, Gender, and Age for Bias Measurement and Mitigation

– Supplementary Information –

Table 8: Classification accuracy on external validation datasets.

		Race Classification															
		All	Female	Male	White	Non-White	Black	Asian	E Asian	SE Asian	Latino	Indian	Mid-East	0-9	10-29	30-49	50+
Twitter	FairFace	.733	.726	.737	.899	.548	.695	.888	.705	.465	.305	.492	.743	.756	.691	.768	.777
	UTKFace	.544	.543	.544	.741	.354	.591	.476	-	-	-	.474	-	.606	.516	.574	.567
	LFWA+	.626	.596	.647	.965	.284	.283	.425	-	-	-	-	-	.639	.562	.705	.751
Media	FairFace	.866	.874	.863	.949	.685	.890	.918	.886	.152	.267	.691	.704	.833	.853	.852	.893
	UTKFace	.772	.795	.763	.883	.546	.802	.588	-	-	-	.599	-	.646	.755	.757	.804
	LFWA+	.679	.823	.835	.978	.393	.485	.578	-	-	-	-	-	.682	.656	.651	.722
Protest	FairFace	.846	.849	.844	.935	.683	.859	.843	.702	.510	.169	.649	.779	.839	.821	.837	.881
	UTKFace	.706	.723	.697	.821	.536	.714	.456	-	-	-	.591	-	.681	.658	.685	.787
	LFWA+	.747	.759	.741	.964	.366	.418	.488	-	-	-	-	-	.689	.645	.668	.801
Average	FairFace	.815	.816	.815	.928	.639	.815	.883	.764	.376	.247	.611	.742	.809	.788	.819	.850
	FairFace 18K	.800	.812	.795	.917	.588	.779	.856	.685	.355	.279	.502	.625	.786	.773	.809	.827
	FairFace 9K	.774	.788	.768	.885	.564	.756	.827	.641	.315	.281	.531	.544	.723	.757	.789	.787
	UTKFace	.674	.687	.668	.815	.479	.702	.507	-	-	-	.555	-	.644	.643	.672	.719
	LFWA+	.684	.726	.741	.969	.348	.395	.497	-	-	-	-	-	.670	.621	.675	.758
		Gender Classification															
		All	Female	Male	White	Non-White	Black	Asian	E Asian	SE Asian	Latino	Indian	Mid-East	0-9	10-29	30-49	50+
Twitter	FairFace	.940	.948	.935	.949	.932	.932	.894	.864	.942	.963	.932	.976	.817	.932	.973	.959
	UTKFace	.884	.859	.899	.897	.874	.864	.829	.803	.871	.901	.898	.947	.671	.874	.933	.912
	LFWA+	.797	.637	.899	.815	.773	.789	.724	.716	.736	.804	.728	.911	.634	.769	.857	.859
Media	CelebA	.829	.955	.750	.850	.812	.818	.764	.716	.839	.843	.831	.876	.539	.818	.889	.881
	FairFace	.973	.957	.980	.976	.969	.953	.956	.967	.891	.980	.977	.988	.821	.952	.984	.979
	UTKFace	.927	.841	.961	.928	.915	.907	.908	.915	.869	.928	.945	.932	.679	.917	.931	.924
	LFWA+	.887	.656	.976	.893	.871	.851	.864	.875	.804	.859	.897	.944	.688	.835	.832	.911
Protest	CelebA	.899	.950	.880	.909	.881	.847	.858	.857	.870	.925	.884	.926	.560	.860	.908	.924
	FairFace	.957	.944	.963	.962	.951	.957	.887	.879	.906	.970	.973	.991	.861	.934	.967	.976
	UTKFace	.901	.829	.934	.905	.873	.911	.814	.802	.843	.902	.918	.921	.611	.812	.924	.919
	LFWA+	.829	.567	.954	.841	.801	.821	.758	.782	.697	.811	.811	.929	.568	.705	.851	.908
Average	CelebA	.882	.935	.856	.893	.866	.876	.892	.750	.833	.892	.878	.956	.492	.842	.904	.927
	FairFace	.957	.950	.959	.962	.951	.947	.912	.903	.913	.971	.961	.985	.833	.939	.975	.971
	FairFace 18K	.941	.930	.946	.946	.934	.931	.891	.886	.895	.955	.960	.967	.803	.920	.957	.962
	FairFace 9K	.926	.921	.927	.929	.921	.922	.864	.851	.883	.942	.951	.974	.760	.901	.949	.943
	UTKFace	.904	.843	.931	.910	.887	.894	.850	.840	.861	.910	.920	.933	.654	.868	.929	.918
Average	LFWA+	.838	.620	.943	.850	.815	.820	.782	.791	.746	.825	.812	.928	.630	.770	.847	.893
	CelebA	.870	.947	.829	.884	.853	.847	.838	.774	.847	.887	.864	.919	.530	.840	.900	.911
		Age Classification															
		All	Female	Male	White	Non-White	Black	Asian	E Asian	SE Asian	Latino	Indian	Mid-East	0-9	10-29	30-49	50+
Twitter	FairFace	.578	.586	.573	.563	.590	.557	.620	.629	.606	.581	.576	.555	.805	.666	.439	.408
	UTKFace	.366	.355	.384	.343	.385	.338	.397	.382	.419	.411	.356	.345	.585	.499	.104	.307
Media	FairFace	.516	.511	.517	.513	.520	.483	.557	.559	.543	.537	.532	.475	.714	.686	.447	.501
	UTKFace	.275	.273	.282	.281	.267	.271	.276	.279	.261	.231	.292	.222	.511	.529	.112	.238
Protest	FairFace	.515	.543	.502	.498	.539	.527	.584	.605	.531	.507	.581	.469	.885	.687	.395	.478
	UTKFace	.302	.306	.294	.291	.319	.305	.316	.318	.312	.314	.371	.318	.516	.503	.114	.349
Average	FairFace	.536	.547	.531	.525	.550	.522	.587	.598	.560	.542	.563	.500	.801	.680	.427	.462
	FairFace 18K	.492	.508	.484	.485	.496	.463	.528	.538	.506	.510	.454	.490	.700	.646	.387	.410
	FairFace 9K	.470	.493	.459	.462	.478	.449	.506	.515	.483	.473	.458	.463	.662	.611	.361	.394
	UTKFace	.314	.311	.320	.305	.324	.305	.330	.326	.331	.319	.340	.295	.537	.510	.110	.298