

A OVERALL ARCHITECTURE OF SHiFT

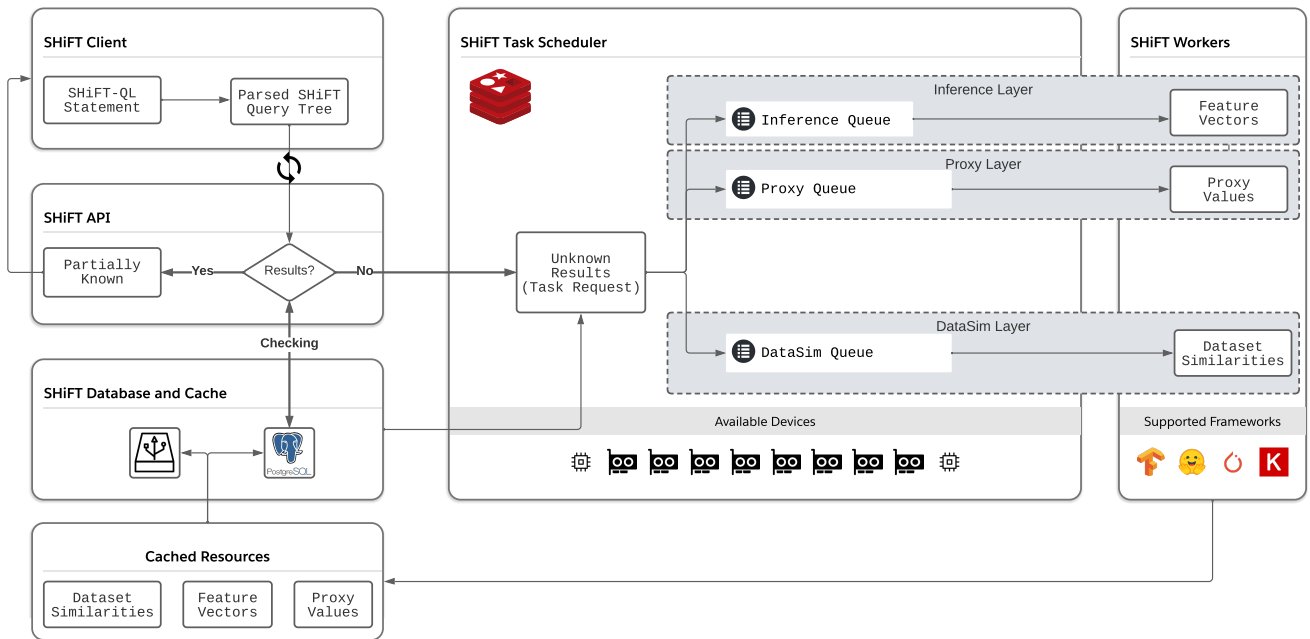


Figure 13: Overall system architecture of SHiFT.

B MODEL DETAILS

Table 3: All models are available with “https://tfhub.dev/” as prefix (part 1/2).

Model	Inference Cost (ms)	Mini-Batch Size
google/cropnet/feature_vector/cassava_disease_V1/1	11	224
google/cropnet/feature_vector/cassava_disease_V1/1	11	224
google/cropnet/feature_vector/concat/1	12	224
google/cropnet/feature_vector/imagenet/1	12	224
google/imagenet/efficientnet_v2_imagenet1k_b0/feature_vector/2	11	224
google/imagenet/efficientnet_v2_imagenet1k_b1/feature_vector/2	14	240
google/imagenet/efficientnet_v2_imagenet1k_b2/feature_vector/2	14	260
google/imagenet/efficientnet_v2_imagenet1k_b3/feature_vector/2	17	300
google/imagenet/efficientnet_v2_imagenet1k_l/feature_vector/2	85	480
google/imagenet/efficientnet_v2_imagenet1k_m/feature_vector/2	55	480
google/imagenet/efficientnet_v2_imagenet1k_s/feature_vector/2	23	384
google/imagenet/efficientnet_v2_imagenet21k_b0/feature_vector/2	11	224
google/imagenet/efficientnet_v2_imagenet21k_b1/feature_vector/2	11	240
google/imagenet/efficientnet_v2_imagenet21k_b2/feature_vector/2	12	260
google/imagenet/efficientnet_v2_imagenet21k_b3/feature_vector/2	14	300
google/imagenet/efficientnet_v2_imagenet21k_ft1k_b0/feature_vector/2	11	224
google/imagenet/efficientnet_v2_imagenet21k_ft1k_b1/feature_vector/2	12	240
google/imagenet/efficientnet_v2_imagenet21k_ft1k_b2/feature_vector/2	13	260
google/imagenet/efficientnet_v2_imagenet21k_ft1k_b3/feature_vector/2	14	300
google/imagenet/efficientnet_v2_imagenet21k_ft1k_l/feature_vector/2	73	480
google/imagenet/efficientnet_v2_imagenet21k_ft1k_m/feature_vector/2	33	480
google/imagenet/efficientnet_v2_imagenet21k_ft1k_xl/feature_vector/2	74	512
google/imagenet/efficientnet_v2_imagenet21k_l/feature_vector/2	63	480
google/imagenet/efficientnet_v2_imagenet21k_m/feature_vector/2	33	480
google/imagenet/efficientnet_v2_imagenet21k_s/feature_vector/2	21	384
google/imagenet/inception_resnet_v2/feature_vector/4	26	224
google/imagenet/inception_v1/feature_vector/4	13	224
google/imagenet/inception_v2/feature_vector/4	11	224
google/imagenet/inception_v3/feature_vector/4	14	224
google/imagenet/inception_v3/feature_vector/5	18	299
google/imagenet/mobilenet_v1_025_128/feature_vector/5	6	128
google/imagenet/mobilenet_v1_025_160/feature_vector/5	6	160
google/imagenet/mobilenet_v1_025_192/feature_vector/5	6	192
google/imagenet/mobilenet_v1_025_224/feature_vector/5	6	224
google/imagenet/mobilenet_v1_050_128/feature_vector/5	6	128
google/imagenet/mobilenet_v1_050_160/feature_vector/5	8	160
google/imagenet/mobilenet_v1_050_192/feature_vector/5	6	192
google/imagenet/mobilenet_v1_050_224/feature_vector/5	6	224
google/imagenet/mobilenet_v1_075_128/feature_vector/5	7	128
google/imagenet/mobilenet_v1_075_160/feature_vector/5	6	160
google/imagenet/mobilenet_v1_075_192/feature_vector/5	6	192
google/imagenet/mobilenet_v1_075_224/feature_vector/5	6	224
google/imagenet/mobilenet_v1_100_128/feature_vector/5	6	128
google/imagenet/mobilenet_v1_100_160/feature_vector/5	7	160
google/imagenet/mobilenet_v1_100_192/feature_vector/5	6	192
google/imagenet/mobilenet_v1_100_224/feature_vector/4	7	224
google/imagenet/mobilenet_v2_035_128/feature_vector/5	8	128
google/imagenet/mobilenet_v2_035_160/feature_vector/5	8	160
google/imagenet/mobilenet_v2_035_192/feature_vector/5	9	192
google/imagenet/mobilenet_v2_035_224/feature_vector/5	8	224
google/imagenet/mobilenet_v2_035_96/feature_vector/5	9	96

Table 4: All models are available with “https://tfhub.dev/” as prefix (part 2/2).

Model	Inference Cost (ms)	Mini-Batch Size
google/imagenet/mobilenet_v2_050_128/feature_vector/5	9	128
google/imagenet/mobilenet_v2_050_160/feature_vector/5	8	160
google/imagenet/mobilenet_v2_050_192/feature_vector/5	8	192
google/imagenet/mobilenet_v2_050_224/feature_vector/5	9	224
google/imagenet/mobilenet_v2_050_96/feature_vector/5	8	96
google/imagenet/mobilenet_v2_075_128/feature_vector/5	9	128
google/imagenet/mobilenet_v2_075_160/feature_vector/5	11	160
google/imagenet/mobilenet_v2_075_192/feature_vector/5	11	192
google/imagenet/mobilenet_v2_075_224/feature_vector/5	10	224
google/imagenet/mobilenet_v2_075_96/feature_vector/5	11	96
google/imagenet/mobilenet_v2_100_128/feature_vector/5	9	128
google/imagenet/mobilenet_v2_100_160/feature_vector/5	9	160
google/imagenet/mobilenet_v2_100_192/feature_vector/5	11	192
google/imagenet/mobilenet_v2_100_224/feature_vector/4	9	224
google/imagenet/mobilenet_v2_100_96/feature_vector/5	8	96
google/imagenet/mobilenet_v2_130_224/feature_vector/5	9	224
google/imagenet/mobilenet_v2_140_224/feature_vector/5	11	224
google/imagenet/mobilenet_v3_large_075_224/feature_vector/5	11	224
google/imagenet/mobilenet_v3_large_100_224/feature_vector/5	10	224
google/imagenet/mobilenet_v3_small_075_224/feature_vector/5	9	224
google/imagenet/mobilenet_v3_small_100_224/feature_vector/5	9	224
google/imagenet/nasnet_mobile/feature_vector/4	19	224
google/imagenet/resnet_v1_101/feature_vector/4	16	224
google/imagenet/resnet_v1_152/feature_vector/4	22	224
google/imagenet/resnet_v1_50/feature_vector/4	13	224
google/imagenet/resnet_v2_101/feature_vector/4	16	224
google/imagenet/resnet_v2_152/feature_vector/4	22	224
google/imagenet/resnet_v2_50/feature_vector/4	13	224
tensorflow/efficientnet/b0/feature-vector/1	12	224
tensorflow/efficientnet/b1/feature-vector/1	15	240
tensorflow/efficientnet/b2/feature-vector/1	17	260
tensorflow/efficientnet/b3/feature-vector/1	21	300
tensorflow/efficientnet/b4/feature-vector/1	32	380
tensorflow/efficientnet/b5/feature-vector/1	44	456
tensorflow/efficientnet/b6/feature-vector/1	79	528
tensorflow/efficientnet/b7/feature-vector/1	151	600
vtab/exemplar/1	13	224
vtab/jigsaw/1	25	224
vtab/relative-patch-location/1	21	224
vtab/rotation/1	12	224
vtab/semi-exemplar-10/1	12	224
vtab/semi-rotation-10/1	12	224
vtab/sup-100/1	12	224
vtab/sup-exemplar-100/1	11	224
vtab/sup-rotation-100/1	12	224
vtab/uncond-bigan/1	17	128
vtab/vae/1	10	128
vtab/wae-gan/1	10	128
vtab/wae-mmd/1	10	128
vtab/wae-ukl/1	10	128