

Sealed Experiment Record

Sealed 2026-10-11 · Signed by the K-Veritas server
Session 24e93d13 · Data hash 3b3e...6cb0

Abstract

This record seals 1 run (kv_run.sh) executed on Intel(R) Xeon(R) W-2145 CPU @ 3.70GHz between 2026-10-10 21:49 and 16:23 UTC. Reported results: acasxu_unsat 138, acasxu_sat 45, acasxu_timeout 2, acasxu_unknown 0. 1 invocation in total, 0 failed. Produced with K-Veritas [1].

What this record proves

These numbers came from the sealed code at this time, unchanged since. Whether the experiment is sound is for the reader to judge.

Verify: kveritas verify <this file> or kveritas.org/verify

1 Setup

Item	Value
Session	24e93d13-4469-4d61-9f1c-9afc2796fb8f
Initialized	2026-10-10T21:49:43Z
Machine	167ec0d6dc9a8170
Operating system	linux / amd64
CPU	Intel(R) Xeon(R) W-2145 CPU @ 3.70GHz, 16 cores
Memory	31.0 GB
GPU	NVIDIA GeForce RTX 5060 Ti, 16311 MiB
Environment, run 1	7cfdc0269f9b9f5b55ba0e205062c579c49db3d9472d5b45b07803aa384551c0
Disclosure	open
Source code, run 1	8bcc8ae7fc6489c3adfe4891edc78aaa567f9ada83c7bd07559964f8317f63ef

2 Runs

#	Command	Duration	Exit	Anchored
1	bash kv_run.sh	18 hours 33 minutes	0	at run end

1 invocation in total: 1 kept in this record, 0 failed, 0 interrupted. Every invocation is recorded by the server, including the ones not kept.

3 Results

Run 1: kv_run.sh

Metric	Final value	Step	Source
instance_wall_s	15.9079	186 (186 readings)	explicit

Inline claim	Value	Phase	Output line
acasxu_unsat	138		430
acasxu_sat	45		431

Inline claim	Value	Phase	Output line
acasxu_timeout	2		432
acasxu_unknown	0		433
acasxu_error	1		434
acasxu_solved	183		435
acasxu_instances	186		436
acasxu_solved_mean_wall_s	15.45		437

4 Execution evidence

Coherence

Coherent (0.33): the telemetry channels move together, as one process.

Telemetry

Run	Samples	CPU time	Peak memory	Peak GPU
1	7200	60756.8 s	27.16 GB	96%

5 Provenance

Run 1: kv_run.sh

Disclosure open. 479 tracked files, 3 snapshots. Every snapshot is bound into the signature.

#	Snapshot	Time	Root	Changed
0	run_start	21:49:44	67d30a4a26e98db9	479
2	run_end	16:23:27	67d30a4a26e98db9	0

1 snapshot with no file change omitted here; full timeline in Appendix B.

Activity: 479 files read, 0 files written, 377 subprocesses. Full list in Appendix B.

6 Verification

Field	Value
Signer	Signed by the K-Veritas server
Signed at	2026-10-11T16:23:29.411901+00:00
Algorithm	RSA-PSS-SHA256, 4096-bit key
Key fingerprint	eeac81653cf44ac029c4069cf2a06d9f
Data hash	3b3ef9f60b7761126e7fdbbc5d74125b5c270e74bce9f27f4d886441f1916cb0
Code bundle hash	5284d74da77ca2025ee1da99c4da131bcb4787f7acfd6f22ccae1fbf8e25a5ec

Run anchors: 1 invocations were anchored at the server when they ended.

Checks a verifier runs

1. The stored canonical data hashes to the data hash above, and the signature verifies over data_hash:nonce:signed_at.
2. The signing key is the K-Veritas server key, not one supplied by the author.
3. Nothing was appended after the seal, and these pages hash to the value bound in the seal.
4. Each run matches the digest the server received when it ended.
5. A supplied code bundle hashes to the code bundle hash above.

References

[1] M. K. Keita and C. Homan. Computer Science Conferences Should Require Nonrepudiable Experimental Results. NeurIPS 2026 Position Paper Track. arXiv:2605.08586.

Appendix

A Full metric series

Run 1: kv_run.sh

Metric	Value	Step	Line	Source
instance_wall_s	14.924	1	59	explicit
instance_wall_s	14.9131	2	61	explicit
instance_wall_s	15.3656	3	63	explicit
instance_wall_s	15.107	4	65	explicit
instance_wall_s	14.942	5	67	explicit
instance_wall_s	14.9224	6	69	explicit
instance_wall_s	14.7896	7	71	explicit
instance_wall_s	14.7117	8	73	explicit
instance_wall_s	14.7057	9	75	explicit
instance_wall_s	14.7543	10	77	explicit
instance_wall_s	15.1174	11	79	explicit
instance_wall_s	15.0466	12	81	explicit
instance_wall_s	14.9424	13	83	explicit
instance_wall_s	15.1977	14	85	explicit
instance_wall_s	15.1851	15	87	explicit
instance_wall_s	16.417	16	89	explicit
instance_wall_s	77.3285	17	91	explicit
instance_wall_s	16.3588	18	93	explicit
instance_wall_s	15.1588	19	95	explicit
instance_wall_s	15.0744	20	97	explicit
instance_wall_s	15.0851	21	99	explicit
instance_wall_s	15.0292	22	101	explicit
instance_wall_s	15.2955	23	103	explicit
instance_wall_s	15.4752	24	105	explicit
instance_wall_s	15.4004	25	107	explicit
instance_wall_s	15.2515	26	109	explicit
instance_wall_s	16.637	27	111	explicit
instance_wall_s	15.2595	28	113	explicit
instance_wall_s	15.1369	29	115	explicit
instance_wall_s	15.2098	30	117	explicit
instance_wall_s	15.4519	31	119	explicit
instance_wall_s	15.5461	32	121	explicit
instance_wall_s	15.8794	33	123	explicit
instance_wall_s	16.6023	34	125	explicit
instance_wall_s	16.6053	35	127	explicit
instance_wall_s	18.5555	36	129	explicit
instance_wall_s	15.4601	37	131	explicit
instance_wall_s	15.7256	38	133	explicit
instance_wall_s	15.1457	39	135	explicit
instance_wall_s	15.1755	40	137	explicit
instance_wall_s	15.3297	41	139	explicit
instance_wall_s	16.4995	42	141	explicit
instance_wall_s	15.3415	43	143	explicit
instance_wall_s	19.3898	44	145	explicit

Metric	Value	Step	Line	Source
instance_wall_s	16.322	45	147	explicit
instance_wall_s	16.1733	46	149	explicit
instance_wall_s	91.8142	47	151	explicit
instance_wall_s	117.695	48	153	explicit
instance_wall_s	5.93377	49	155	explicit
instance_wall_s	121.115	50	157	explicit
instance_wall_s	74.6051	51	159	explicit
instance_wall_s	16.2112	52	161	explicit
instance_wall_s	16.2452	53	163	explicit
instance_wall_s	16.2347	54	165	explicit
instance_wall_s	3.72758	55	167	explicit
instance_wall_s	3.70583	56	169	explicit
instance_wall_s	3.82445	57	171	explicit
instance_wall_s	3.74014	58	173	explicit
instance_wall_s	3.69361	59	175	explicit
instance_wall_s	3.80182	60	177	explicit
instance_wall_s	3.81927	61	179	explicit
instance_wall_s	3.71648	62	181	explicit
instance_wall_s	3.69341	63	183	explicit
instance_wall_s	3.69694	64	185	explicit
instance_wall_s	3.91486	65	187	explicit
instance_wall_s	119.87	66	189	explicit
instance_wall_s	3.72647	67	191	explicit
instance_wall_s	3.70378	68	193	explicit
instance_wall_s	3.77782	69	195	explicit
instance_wall_s	3.90701	70	197	explicit
instance_wall_s	3.7417	71	199	explicit
instance_wall_s	3.74723	72	201	explicit
instance_wall_s	3.79595	73	203	explicit
instance_wall_s	17.4873	74	205	explicit
instance_wall_s	3.78863	75	207	explicit
instance_wall_s	3.74535	76	209	explicit
instance_wall_s	3.72955	77	211	explicit
instance_wall_s	3.66322	78	213	explicit
instance_wall_s	3.69032	79	215	explicit
instance_wall_s	3.88707	80	217	explicit
instance_wall_s	3.81739	81	219	explicit
instance_wall_s	3.74602	82	221	explicit
instance_wall_s	3.72258	83	223	explicit
instance_wall_s	122.825	84	225	explicit
instance_wall_s	3.81428	85	227	explicit
instance_wall_s	3.69641	86	229	explicit
instance_wall_s	3.79544	87	231	explicit
instance_wall_s	3.75101	88	233	explicit
instance_wall_s	3.80247	89	235	explicit
instance_wall_s	3.7337	90	237	explicit
instance_wall_s	16.2088	91	239	explicit
instance_wall_s	15.0639	92	241	explicit
instance_wall_s	15.9882	93	243	explicit
instance_wall_s	14.8973	94	245	explicit

Metric	Value	Step	Line	Source
instance_wall_s	15.5668	95	247	explicit
instance_wall_s	14.7892	96	249	explicit
instance_wall_s	3.67853	97	251	explicit
instance_wall_s	3.73336	98	253	explicit
instance_wall_s	3.68437	99	255	explicit
instance_wall_s	15.0899	100	257	explicit
instance_wall_s	15.2167	101	259	explicit
instance_wall_s	15.1644	102	261	explicit
instance_wall_s	14.7449	103	263	explicit
instance_wall_s	14.5705	104	265	explicit
instance_wall_s	14.576	105	267	explicit
instance_wall_s	14.9371	106	269	explicit
instance_wall_s	14.8343	107	271	explicit
instance_wall_s	14.5819	108	273	explicit
instance_wall_s	15.224	109	275	explicit
instance_wall_s	14.9255	110	277	explicit
instance_wall_s	14.7383	111	279	explicit
instance_wall_s	14.7401	112	281	explicit
instance_wall_s	14.9775	113	283	explicit
instance_wall_s	15.1271	114	285	explicit
instance_wall_s	14.8685	115	287	explicit
instance_wall_s	15.0384	116	289	explicit
instance_wall_s	14.923	117	291	explicit
instance_wall_s	15.189	118	293	explicit
instance_wall_s	15.2305	119	295	explicit
instance_wall_s	14.8945	120	297	explicit
instance_wall_s	14.4668	121	299	explicit
instance_wall_s	14.6311	122	301	explicit
instance_wall_s	14.8613	123	303	explicit
instance_wall_s	14.8189	124	305	explicit
instance_wall_s	14.8438	125	307	explicit
instance_wall_s	14.9698	126	309	explicit
instance_wall_s	15.3163	127	311	explicit
instance_wall_s	14.9111	128	313	explicit
instance_wall_s	14.8307	129	315	explicit
instance_wall_s	14.5931	130	317	explicit
instance_wall_s	14.8134	131	319	explicit
instance_wall_s	14.7019	132	321	explicit
instance_wall_s	14.5773	133	323	explicit
instance_wall_s	14.9395	134	325	explicit
instance_wall_s	14.9191	135	327	explicit
instance_wall_s	15.2082	136	329	explicit
instance_wall_s	15.4593	137	331	explicit
instance_wall_s	15.077	138	333	explicit
instance_wall_s	14.9008	139	335	explicit
instance_wall_s	14.9141	140	337	explicit
instance_wall_s	14.8335	141	339	explicit
instance_wall_s	3.7072	142	341	explicit
instance_wall_s	3.67842	143	343	explicit
instance_wall_s	3.75047	144	345	explicit

Metric	Value	Step	Line	Source	
instance_wall_s	14.887	145	347	explicit	
instance_wall_s	15.097	146	349	explicit	
instance_wall_s	14.913	147	351	explicit	
instance_wall_s	14.8445	148	353	explicit	
instance_wall_s	14.8265	149	355	explicit	
instance_wall_s	14.8917	150	357	explicit	
instance_wall_s	14.6123	151	359	explicit	
instance_wall_s	14.8008	152	361	explicit	
instance_wall_s	14.6011	153	363	explicit	
instance_wall_s	15.1771	154	365	explicit	
instance_wall_s	14.9167	155	367	explicit	
instance_wall_s	14.6615	156	369	explicit	
instance_wall_s	14.6318	157	371	explicit	
instance_wall_s	14.8209	158	373	explicit	
instance_wall_s	14.6537	159	375	explicit	
instance_wall_s	14.8759	160	377	explicit	
instance_wall_s	14.8762	161	379	explicit	
instance_wall_s	14.9215	162	381	explicit	
instance_wall_s	14.9423	163	383	explicit	
instance_wall_s	14.9328	164	385	explicit	
instance_wall_s	14.9436	165	387	explicit	
instance_wall_s	14.8154	166	389	explicit	
instance_wall_s	14.8527	167	391	explicit	
instance_wall_s	14.4944	168	393	explicit	
instance_wall_s	14.8449	169	395	explicit	
instance_wall_s	14.9158	170	397	explicit	
instance_wall_s	14.8051	171	399	explicit	
instance_wall_s	14.8481	172	401	explicit	
instance_wall_s	14.7268	173	403	explicit	
instance_wall_s	14.767	174	405	explicit	
instance_wall_s	14.7717	175	407	explicit	
instance_wall_s	14.8766	176	409	explicit	
instance_wall_s	14.8675	177	411	explicit	
instance_wall_s	14.7662	178	413	explicit	
instance_wall_s	14.8605	179	415	explicit	
instance_wall_s	14.8986	180	417	explicit	
instance_wall_s	16.8248	181	419	explicit	
instance_wall_s	16.5844	182	421	explicit	
instance_wall_s	63751.2	183	423	explicit	
instance_wall_s	107.992	184	425	explicit	
instance_wall_s	16.1349	185	427	explicit	
instance_wall_s	15.9079	186	429	explicit	
Phase	Line	Time	CPU time	Memory	GPU
verify_acasxu	57	21:49:44	1.5 s	0.50 GB	

B Provenance timeline and activity map

Run 1: kv_run.sh

#	Snapshot	Time	Root	Changed
0	run_start	21:49:44	67d30a4a26e98db9	479
1	phase verify_acasxu	21:49:44	67d30a4a26e98db9	0
2	run_end	16:23:27	67d30a4a26e98db9	0

Event	Path or command	Hash
read	kv_run.sh	
read	src/main.py	
read	.github/workflows/deploy.yml	
read	env.yaml	
read	installation/env_dnnv.yaml	
read	installation/env_pt113.yaml	
read	installation/env_pt201.yaml	
read	installation/env_pt212.yaml	
read	pyproject.toml	
read	setup.sh	
read	src/__init__.py	
read	src/abstractor/auto_LiRPA/__init__.py	
read	src/abstractor/auto_LiRPA/backward_bound.py	
read	src/abstractor/auto_LiRPA/bound_op_map.py	
read	src/abstractor/auto_LiRPA/bound_ops.py	
read	src/abstractor/auto_LiRPA/cuda/cuda_utils.cpp	
read	src/abstractor/auto_LiRPA/forward_bound.py	
read	src/abstractor/auto_LiRPA/linear_bound.py	
read	src/abstractor/auto_LiRPA/operators/activations.py	
read	src/abstractor/auto_LiRPA/operators/add_sub.py	
read	src/abstractor/auto_LiRPA/operators/bivariate.py	
read	src/abstractor/auto_LiRPA/operators/convolution.py	
read	src/abstractor/auto_LiRPA/operators/dropout.py	
read	src/abstractor/auto_LiRPA/operators/dtype.py	
read	src/abstractor/auto_LiRPA/operators/gelu.py	
read	src/abstractor/auto_LiRPA/operators/indexing.py	
read	src/abstractor/auto_LiRPA/operators/logical.py	
read	src/abstractor/auto_LiRPA/operators/normalization.py	
read	src/abstractor/auto_LiRPA/operators/reduce.py	
read	src/abstractor/auto_LiRPA/operators/relu.py	
read	src/abstractor/auto_LiRPA/operators/reshape.py	
read	src/abstractor/auto_LiRPA/operators/resize.py	
read	src/abstractor/auto_LiRPA/operators/shape.py	
read	src/abstractor/auto_LiRPA/operators/softmax.py	
read	src/abstractor/auto_LiRPA/operators/solver_utils.py	
read	src/abstractor/auto_LiRPA/operators/tanh.py	
read	src/abstractor/auto_LiRPA/optimized_bounds.py	
read	src/abstractor/auto_LiRPA/solver_module.py	
read	src/abstractor/auto_LiRPA/stabilization.py	
read	src/abstractor/params.py	
read	src/abstractor/utils.py	

Event	Path or command	Hash
read	src/attacker/attacker.py	
read	src/attacker/pgd_attack/general.py	
read	src/attacker/pgd_attack/util.py	
read	src/helper/misc/error.py	
read	src/helper/misc/export.py	
read	src/helper/misc/logger.py	
read	src/helper/misc/result.py	
read	src/helper/misc/tensor_storage.py	
read	src/helper/misc/torch_cuda_memory.py	
read	src/helper/misc/tqdm.py	
read	src/helper/misc/utility.py	
read	src/helper/network/onnx2pytorch/convert/debug.py	
read	src/helper/network/onnx2pytorch/convert/layer.py	
read	src/helper/network/onnx2pytorch/convert/model.py	
read	src/helper/network/onnx2pytorch/helpers.py	
read	src/helper/network/onnx2pytorch/operations/add.py	
read	src/helper/network/onnx2pytorch/operations/base.py	
read	src/helper/network/onnx2pytorch/operations/batchnorm.py	
read	src/helper/network/onnx2pytorch/operations/bitshift.py	
read	src/helper/network/onnx2pytorch/operations/clip.py	
read	src/helper/network/onnx2pytorch/operations/div.py	
read	src/helper/network/onnx2pytorch/operations/expand.py	
read	src/helper/network/onnx2pytorch/operations/gather.py	
read	src/helper/network/onnx2pytorch/operations/instancenorm.py	
read	src/helper/network/onnx2pytorch/operations/onehot.py	
read	src/helper/network/onnx2pytorch/operations/prelu.py	
read	src/helper/network/onnx2pytorch/operations/range.py	
read	src/helper/network/onnx2pytorch/operations/reshape.py	
read	src/helper/network/onnx2pytorch/operations/resize.py	
read	src/helper/network/onnx2pytorch/operations/scatter.py	
read	src/helper/network/onnx2pytorch/operations/shape.py	
read	src/helper/network/onnx2pytorch/operations/slice.py	
read	src/helper/network/onnx2pytorch/operations/squeeze.py	
read	src/helper/network/onnx2pytorch/operations/tile.py	
read	src/helper/network/onnx2pytorch/utils.py	
read	src/helper/network/read_onnx.py	
read	src/helper/network/read_pt.py	
read	src/helper/network/simplify_onnx.py	
read	src/helper/proof/create_apt.py	
read	src/helper/spec/read_vnnlib.py	
read	src/helper/spec/spec_vnnlib.py	
read	src/helper/spec/write_vnnlib.py	
read	src/heuristic/decision_heuristics.py	
read	src/heuristic/decompose_heuristics.py	
read	src/heuristic/ig.py	
read	src/heuristic/restart_heuristics.py	
read	src/heuristic/util.py	
read	src/main_dec.py	
read	src/setting.py	
read	src/test.py	

Event	Path or command	Hash
read	src/tightener/gpu_tightener.py	
read	src/train/config/cifar10_3.yaml	
read	src/train/config/cifar10_3_1.yaml	
read	src/train/config/cifar10_3_2.yaml	
read	src/train/config/cifar10_3_3.yaml	
read	src/train/config/cifar10_3_4.yaml	
read	src/train/config/cifar10_4.yaml	
read	src/train/config/cifar10_4_1.yaml	
read	src/train/config/cifar10_4_2.yaml	
read	src/train/config/cifar10_toy.yaml	
read	src/train/config/vae_base.yaml	
read	src/train/models/fc/mnistfc.py	
read	src/train/models/resnet/resnet.py	
read	src/train/models/resnet/resnet_utils.py	
read	src/train/models/rnn/mnist.py	
read	src/train/models/vae/blocks.py	
read	src/train/models/vae/cnn.py	
read	src/train/models/vae/discriminator.py	
read	src/train/models/vae/lpips.py	
read	src/train/models/vae/vae.py	
read	src/train/models/vae/vae_naive.py	
read	src/train/models/vit/vit.py	
read	src/train/models/vit_old/cct.py	
read	src/train/models/vit_old/vit.py	
read	src/train/models/vit_old/vit_utils.py	
read	src/train/scheduler/__init__.py	
read	src/train/scheduler/linear_noise_scheduler.py	
read	src/train/scripts/generate_instances_cifar10.py	
read	src/train/scripts/generate_instances_mnist_rnn.py	
read	src/train/scripts/infer_classification.py	
read	src/train/scripts/infer_recon.py	
read	src/train/scripts/train.sh	
read	src/train/scripts/train_classification.py	
read	src/train/scripts/train_mnist.py	
read	src/train/scripts/train_recon.py	
read	src/train/scripts/train_ref.py	
read	src/train/scripts/train_rnn_mnist.py	
read	src/train/timm/__init__.py	
read	src/train/timm/data/__init__.py	
read	src/train/timm/data/auto_augment.py	
read	src/train/timm/data/config.py	
read	src/train/timm/data/constants.py	
read	src/train/timm/data/dataset.py	
read	src/train/timm/data/dataset_factory.py	
read	src/train/timm/data/dataset_info.py	
read	src/train/timm/data/distributed_sampler.py	
read	src/train/timm/data/imagenet_info.py	
read	src/train/timm/data/loader.py	
read	src/train/timm/data/mixup.py	
read	src/train/timm/data/random_erasing.py	

Event	Path or command	Hash
read	src/train/timm/data/readers/__init__.py	
read	src/train/timm/data/readers/class_map.py	
read	src/train/timm/data/readers/img_extensions.py	
read	src/train/timm/data/readers/reader.py	
read	src/train/timm/data/readers/reader_factory.py	
read	src/train/timm/data/readers/reader_hfds.py	
read	src/train/timm/data/readers/reader_hfids.py	
read	src/train/timm/data/readers/reader_image_folder.py	
read	src/train/timm/data/readers/reader_image_in_tar.py	
read	src/train/timm/data/readers/reader_image_tar.py	
read	src/train/timm/data/readers/reader_tfds.py	
read	src/train/timm/data/readers/reader_wds.py	
read	src/train/timm/data/readers/shared_count.py	
read	src/train/timm/data/real_labels.py	
read	src/train/timm/data/tf_preprocessing.py	
read	src/train/timm/data/transforms.py	
read	src/train/timm/data/transforms_factory.py	
read	src/train/timm/layers/__init__.py	
read	src/train/timm/layers/activations.py	
read	src/train/timm/layers/activations_me.py	
read	src/train/timm/layers/adaptive_avgmax_pool.py	
read	src/train/timm/layers/attention2d.py	
read	src/train/timm/layers/attention_pool.py	
read	src/train/timm/layers/attention_pool2d.py	
read	src/train/timm/layers/blur_pool.py	
read	src/train/timm/layers/bottleneck_attn.py	
read	src/train/timm/layers/cbam.py	
read	src/train/timm/layers/classifier.py	
read	src/train/timm/layers/cond_conv2d.py	
read	src/train/timm/layers/config.py	
read	src/train/timm/layers/conv2d_same.py	
read	src/train/timm/layers/conv_bn_act.py	
read	src/train/timm/layers/create_act.py	
read	src/train/timm/layers/create_attn.py	
read	src/train/timm/layers/create_conv2d.py	
read	src/train/timm/layers/create_norm.py	
read	src/train/timm/layers/create_norm_act.py	
read	src/train/timm/layers/drop.py	
read	src/train/timm/layers/eca.py	
read	src/train/timm/layers/evo_norm.py	
read	src/train/timm/layers/fast_norm.py	
read	src/train/timm/layers/filter_response_norm.py	
read	src/train/timm/layers/format.py	
read	src/train/timm/layers/gather_excite.py	
read	src/train/timm/layers/global_context.py	
read	src/train/timm/layers/grid.py	
read	src/train/timm/layers/grn.py	
read	src/train/timm/layers/halo_attn.py	
read	src/train/timm/layers/helpers.py	
read	src/train/timm/layers/hybrid_embed.py	

Event	Path or command	Hash
read	src/train/timm/layers/inplace_abn.py	
read	src/train/timm/layers/interpolate.py	
read	src/train/timm/layers/lambd_layer.py	
read	src/train/timm/layers/linear.py	
read	src/train/timm/layers/median_pool.py	
read	src/train/timm/layers/mixed_conv2d.py	
read	src/train/timm/layers/ml_decoder.py	
read	src/train/timm/layers/mlp.py	
read	src/train/timm/layers/non_local_attn.py	
read	src/train/timm/layers/norm.py	
read	src/train/timm/layers/norm_act.py	
read	src/train/timm/layers/padding.py	
read	src/train/timm/layers/patch_dropout.py	
read	src/train/timm/layers/patch_embed.py	
read	src/train/timm/layers/pool2d_same.py	
read	src/train/timm/layers/pos_embed.py	
read	src/train/timm/layers/pos_embed_rel.py	
read	src/train/timm/layers/pos_embed_sincos.py	
read	src/train/timm/layers/selective_kernel.py	
read	src/train/timm/layers/separable_conv.py	
read	src/train/timm/layers/space_to_depth.py	
read	src/train/timm/layers/split_attn.py	
read	src/train/timm/layers/split_batchnorm.py	
read	src/train/timm/layers/squeeze_excite.py	
read	src/train/timm/layers/std_conv.py	
read	src/train/timm/layers/test_time_pool.py	
read	src/train/timm/layers/trace_utils.py	
read	src/train/timm/layers/typing.py	
read	src/train/timm/layers/weight_init.py	
read	src/train/timm/loss/__init__.py	
read	src/train/timm/loss/asymmetric_loss.py	
read	src/train/timm/loss/binary_cross_entropy.py	
read	src/train/timm/loss/cross_entropy.py	
read	src/train/timm/loss/jsd.py	
read	src/train/timm/models/__init__.py	
read	src/train/timm/models/_builder.py	
read	src/train/timm/models/_efficientnet_blocks.py	
read	src/train/timm/models/_efficientnet_builder.py	
read	src/train/timm/models/_factory.py	
read	src/train/timm/models/_features.py	
read	src/train/timm/models/_features_fx.py	
read	src/train/timm/models/_helpers.py	
read	src/train/timm/models/_hub.py	
read	src/train/timm/models/_manipulate.py	
read	src/train/timm/models/_pretrained.py	
read	src/train/timm/models/_prune.py	
read	src/train/timm/models/_registry.py	
read	src/train/timm/models/beit.py	
read	src/train/timm/models/byoanet.py	
read	src/train/timm/models/byobnet.py	

Event	Path or command	Hash
read	src/train/timm/models/cait.py	
read	src/train/timm/models/coat.py	
read	src/train/timm/models/convit.py	
read	src/train/timm/models/convmixer.py	
read	src/train/timm/models/convnext.py	
read	src/train/timm/models/crossvit.py	
read	src/train/timm/models/cspnet.py	
read	src/train/timm/models/davit.py	
read	src/train/timm/models/deit.py	
read	src/train/timm/models/densenet.py	
read	src/train/timm/models/dla.py	
read	src/train/timm/models/dpn.py	
read	src/train/timm/models/edgenext.py	
read	src/train/timm/models/efficientformer.py	
read	src/train/timm/models/efficientformer_v2.py	
read	src/train/timm/models/efficientnet.py	
read	src/train/timm/models/efficientvit_mit.py	
read	src/train/timm/models/efficientvit_msra.py	
read	src/train/timm/models/eva.py	
read	src/train/timm/models/factory.py	
read	src/train/timm/models/fastvit.py	
read	src/train/timm/models/features.py	
read	src/train/timm/models/focalnet.py	
read	src/train/timm/models/fx_features.py	
read	src/train/timm/models/gcvit.py	
read	src/train/timm/models/ghostnet.py	
read	src/train/timm/models/hardcorenas.py	
read	src/train/timm/models/helpers.py	
read	src/train/timm/models/hgnet.py	
read	src/train/timm/models/hiera.py	
read	src/train/timm/models/hrnet.py	
read	src/train/timm/models/hub.py	
read	src/train/timm/models/inception_next.py	
read	src/train/timm/models/inception_resnet_v2.py	
read	src/train/timm/models/inception_v3.py	
read	src/train/timm/models/inception_v4.py	
read	src/train/timm/models/layers/__init__.py	
read	src/train/timm/models/levit.py	
read	src/train/timm/models/maxxvit.py	
read	src/train/timm/models/metaformer.py	
read	src/train/timm/models/mlp_mixer.py	
read	src/train/timm/models/mobilenetv3.py	
read	src/train/timm/models/mobilevit.py	
read	src/train/timm/models/mvitv2.py	
read	src/train/timm/models/nasnet.py	
read	src/train/timm/models/nest.py	
read	src/train/timm/models/nextvit.py	
read	src/train/timm/models/nfnet.py	
read	src/train/timm/models/pit.py	
read	src/train/timm/models/pnasnet.py	

Event	Path or command	Hash
read	src/train/timm/models/pvt_v2.py	
read	src/train/timm/models/rdnet.py	
read	src/train/timm/models/registry.py	
read	src/train/timm/models/regnet.py	
read	src/train/timm/models/repghost.py	
read	src/train/timm/models/repvit.py	
read	src/train/timm/models/res2net.py	
read	src/train/timm/models/resnest.py	
read	src/train/timm/models/resnet.py	
read	src/train/timm/models/resnetv2.py	
read	src/train/timm/models/rexnet.py	
read	src/train/timm/models/selecsls.py	
read	src/train/timm/models/senet.py	
read	src/train/timm/models/sequencer.py	
read	src/train/timm/models/sknet.py	
read	src/train/timm/models/swin_transformer.py	
read	src/train/timm/models/swin_transformer_v2.py	
read	src/train/timm/models/swin_transformer_v2_cr.py	
read	src/train/timm/models/tiny_vit.py	
read	src/train/timm/models/tnt.py	
read	src/train/timm/models/tresnet.py	
read	src/train/timm/models/twins.py	
read	src/train/timm/models/vgg.py	
read	src/train/timm/models/visformer.py	
read	src/train/timm/models/vision_transformer.py	
read	src/train/timm/models/vision_transformer_hybrid.py	
read	src/train/timm/models/vision_transformer_relpos.py	
read	src/train/timm/models/vision_transformer_sam.py	
read	src/train/timm/models/vitamin.py	
read	src/train/timm/models/volo.py	
read	src/train/timm/models/vovnet.py	
read	src/train/timm/models/xception.py	
read	src/train/timm/models/xception_aligned.py	
read	src/train/timm/models/xcit.py	
read	src/train/timm/optim/__init__.py	
read	src/train/timm/optim/adabelief.py	
read	src/train/timm/optim/adafactor.py	
read	src/train/timm/optim/adahessian.py	
read	src/train/timm/optim/adamp.py	
read	src/train/timm/optim/adamw.py	
read	src/train/timm/optim/adan.py	
read	src/train/timm/optim/lamb.py	
read	src/train/timm/optim/lars.py	
read	src/train/timm/optim/lion.py	
read	src/train/timm/optim/lookahead.py	
read	src/train/timm/optim/madgrad.py	
read	src/train/timm/optim/nadam.py	
read	src/train/timm/optim/nadamw.py	
read	src/train/timm/optim/nvovograd.py	
read	src/train/timm/optim/optim_factory.py	

Event	Path or command	Hash
read	src/train/timm/optim/radam.py	
read	src/train/timm/optim/rmsprop_tf.py	
read	src/train/timm/optim/sgdp.py	
read	src/train/timm/optim/sgdw.py	
read	src/train/timm/scheduler/__init__.py	
read	src/train/timm/scheduler/cosine_lr.py	
read	src/train/timm/scheduler/multistep_lr.py	
read	src/train/timm/scheduler/plateau_lr.py	
read	src/train/timm/scheduler/poly_lr.py	
read	src/train/timm/scheduler/scheduler.py	
read	src/train/timm/scheduler/scheduler_factory.py	
read	src/train/timm/scheduler/step_lr.py	
read	src/train/timm/scheduler/tanh_lr.py	
read	src/train/timm/utils/__init__.py	
read	src/train/timm/utils/agc.py	
read	src/train/timm/utils/attention_extract.py	
read	src/train/timm/utils/checkpoint_saver.py	
read	src/train/timm/utils/clip_grad.py	
read	src/train/timm/utils/cuda.py	
read	src/train/timm/utils/decay_batch.py	
read	src/train/timm/utils/distributed.py	
read	src/train/timm/utils/jit.py	
read	src/train/timm/utils/log.py	
read	src/train/timm/utils/metrics.py	
read	src/train/timm/utils/misc.py	
read	src/train/timm/utils/model.py	
read	src/train/timm/utils/model_ema.py	
read	src/train/timm/utils/onnx.py	
read	src/train/timm/utils/random.py	
read	src/train/timm/utils/summary.py	
read	src/train/timm/version.py	
read	src/verifier/dec_utils.py	
read	src/verifier/dec_verifier.py	
read	src/verifier/mip_solver.py	
read	src/verifier/utils.py	
read	src/verifier/verifier.py	
read	src/wrapper.py	
read	third_party/haio/haio/__init__.py	
read	third_party/haio/haio/_version.py	
read	third_party/haio/haio/csrc/haio.cpp	
read	third_party/haio/haio/csrc/haio.h	
read	third_party/haio/haio/csrc/macros.h	
read	third_party/haio/haio/csrc/ops/any_eq_any.cpp	
read	third_party/haio/haio/csrc/ops/any_eq_any.h	
read	third_party/haio/haio/csrc/ops/autograd/any_eq_any_kernel.cpp	
read	third_party/haio/haio/csrc/ops/autograd/fill_if_eq_any_kernel.cpp	
read	third_party/haio/haio/csrc/ops/cpu/any_eq_any_kernel.cpp	
read	third_party/haio/haio/csrc/ops/cpu/cpu_helpers.h	
read	third_party/haio/haio/csrc/ops/cpu/fill_if_eq_any_kernel.cpp	
read	third_party/haio/haio/csrc/ops/cuda/cuda_helpers.h	

Event	Path or command	Hash
read	third_party/haio/haio/csrc/ops/fill_if_eq_any.cpp	
read	third_party/haio/haio/csrc/ops/fill_if_eq_any.h	
read	third_party/haio/haio/csrc/ops/ops.h	
read	third_party/haio/haio/csrc/ops/utls/dispatch.h	
read	third_party/haio/haio/extension.py	
read	third_party/haio/haio/ops/__init__.py	
read	third_party/haio/haio/ops/any_eq.py	
read	third_party/haio/haio/ops/fill_if_eq_any.py	
read	third_party/haio/pyproject.toml	
read	third_party/haio/setup.cfg	
read	third_party/haio/setup.py	
read	third_party/haio/tests/test_haio.py	
read	third_party/haio/tests/test_ops.py	
read	third_party/haio/tools/packaging/audit_torch_extension.py	
read	third_party/haio/tools/packaging/prepare_build_environment_linux.sh	
read	third_party/haio/tools/packaging/prepare_build_environment_macos.sh	
read	third_party/haio/tools/packaging/prepare_build_environment_windows.sh	
read	vnncomp-config.yaml	
read	vnncomp_scripts/install_tool.sh	
read	vnncomp_scripts/prepare_instance.sh	
read	vnncomp_scripts/run_instance.sh	
read	web/deploy-backend.sh	
read	web/run_server.sh	
read	web/server.py	
read	web/setup-ngrok-tunnel.sh	
read	src/helper/network/onnx2pytorch/__init__.py	
read	src/helper/network/onnx2pytorch/convert/__init__.py	
read	src/helper/network/onnx2pytorch/constants.py	
read	src/helper/network/onnx2pytorch/operations/__init__.py	
read	src/helper/network/onnx2pytorch/operations/globalaveragepool.py	
read	src/helper/network/onnx2pytorch/operations/nonmaxsuppression.py	
read	src/helper/network/onnx2pytorch/operations/constantofshape.py	
read	src/helper/network/onnx2pytorch/operations/scatterelements.py	
read	src/helper/network/onnx2pytorch/operations/thresholdedrelu.py	
read	src/helper/network/onnx2pytorch/operations/transpose.py	
read	src/helper/network/onnx2pytorch/operations/unsqueeze.py	
read	src/helper/network/onnx2pytorch/operations/scatternd.py	
read	src/helper/network/onnx2pytorch/operations/reducesum.py	
read	src/helper/network/onnx2pytorch/operations/gathernd.py	
read	src/helper/network/onnx2pytorch/operations/constant.py	
read	src/helper/network/onnx2pytorch/operations/lstm.py	
read	src/helper/network/onnx2pytorch/operations/argmax.py	
read	src/helper/network/onnx2pytorch/operations/matmul.py	
read	src/helper/network/onnx2pytorch/operations/split.py	
read	src/helper/network/onnx2pytorch/operations/where.py	
read	src/helper/network/onnx2pytorch/operations/topk.py	
read	src/helper/network/onnx2pytorch/operations/loop.py	
read	src/helper/network/onnx2pytorch/operations/cast.py	
read	src/helper/network/onnx2pytorch/operations/pad.py	
read	src/helper/network/onnx2pytorch/convert/attribute.py	

Event	Path or command	Hash
read	src/helper/network/onnx2pytorch/convert/operations.py	
read	src/helper/spec/objective.py	
read	src/configure/advanced.py	
read	src/heuristic/domains_list.py	
read	src/helper/proof/reasoning_domains.py	
read	src/heuristic/sat_solver.py	
read	src/abstractor/auto_LiRPA/perturbations.py	
read	src/abstractor/auto_LiRPA/patches.py	
read	src/abstractor/auto_LiRPA/utils.py	
read	src/abstractor/auto_LiRPA/bounded_tensor.py	
read	src/abstractor/auto_LiRPA/bound_general.py	
read	src/abstractor/auto_LiRPA/beta_crown.py	
read	src/abstractor/auto_LiRPA/cuda_utils.py	
read	src/abstractor/auto_LiRPA/operators/__init__.py	
read	src/abstractor/auto_LiRPA/operators/activation_base.py	
read	src/abstractor/auto_LiRPA/operators/clampmult.py	
read	src/abstractor/auto_LiRPA/operators/base.py	
read	src/abstractor/auto_LiRPA/operators/convex_concave.py	
read	src/abstractor/auto_LiRPA/operators/constant.py	
read	src/abstractor/auto_LiRPA/operators/leaf.py	
read	src/abstractor/auto_LiRPA/operators/trigonometric.py	
read	src/abstractor/auto_LiRPA/operators/nonlinear.py	
read	src/abstractor/auto_LiRPA/operators/slice_concat.py	
read	src/abstractor/auto_LiRPA/operators/linear.py	
read	src/abstractor/auto_LiRPA/operators/pooling.py	
read	src/abstractor/auto_LiRPA/operators/minmax.py	
read	src/abstractor/auto_LiRPA/operators/rnn.py	
read	src/abstractor/auto_LiRPA/parse_graph.py	
read	src/abstractor/auto_LiRPA/interval_bound.py	
read	src/abstractor/auto_LiRPA/edit_graph.py	
read	src/abstractor/auto_LiRPA/optimize_graph.py	
read	src/helper/misc/check.py	
read	src/tightener/cpu_tightener.py	
read	src/tightener/utils.py	
read	src/helper/misc/adam_clipping.py	
read	src/attacker/mip_attack.py	
read	src/attacker/random_attack.py	
read	src/abstractor/abstractor.py	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	

Event	Path or command	Hash
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	cut -d, -f1	
process	head -1 /var/tmp/kv-repro/041-dynaroars-neuralsat/data/results-1791668984/2...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	

Event	Path or command	Hash
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
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process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	bash kv_run.sh	
process	bash kv_run.sh	

Event	Path or command	Hash
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
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process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	pid 3095651	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	

Event	Path or command	Hash
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
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process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	

Event	Path or command	Hash
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	bash kv_run.sh	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
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process	bash kv_run.sh	
process	bash kv_run.sh	
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process	python main.py --net /var/tmp/kv-repro/041-dynaroars-neuralsat/data/acasxu/...	
process	bash kv_run.sh	
process	pid 3134647	

C Run history

Invocation 1, OK, 18 hours 33 minutes, 438 output lines, started 2026-10-10T21:49:44

metric_hash 0d37395ee7b6f7bd79760c7bc2972ebba8def78d188fcd5d5175e23d96f58b6b
run_digest 11862bbde36fd717b7448723d18fa722e0c0d1dd15ebf6d3cc9bd194a92f2e73
anchored at run end

D Raw seal fields and hashes

Seal

data_hash 3b3ef9f60b7761126e7fdbbc5d74125b5c270e74bce9f27f4d886441f1916cb0
signed_message_hash 7164034f8050940c782514c0fb8b147109896614a5139d41c96920a8dbec90ca
nonce fea4db2af1c4b49145af460ba2fc02d0
signed_at 2026-10-11T16:23:29.411901+00:00
sealed_at 2026-10-11T16:23:29.490406952Z
checkout_bundle 5284d74da77ca2025ee1da99c4da131bcb4787f7acfd6f22ccae1fbf8e25a5ec

Signature (base64)

wjHTGIMVwudJoH+T61b2S6P8+E1MmXFyALRpqqj1N1tjJ08KqU6LZI8C33FVe/ndhCImR5Aqurjh+t1k2NkaW/lZb
y9otxgJx2d3uGg3M04Yu/w0mxjvWAFueGTL6zwqKFdrIEPR3AcpPKwDZ+wTqxS5lpYfGsZVBqu96KeSxUrcmPlyY
ORCRULAQtfLjRnft/+zRyU2gz24qn8I/TvM3U5cbCHwsfsYOVV9nRV/uyvGm1kdXr9d6/MdMtjCvrX90ICXWHtn
zV1/zwMiH2DjKdrRM3AzbFLjQBV03dzQmF2JFsyaPogGjw1TWB5qoeH4yX7MjHSF8Xn84ZQGUG0Z3FUVFvbN/qN
bjuuagMGGtKNLB1+b9XUEzDPULEEdjkdnfEqXxh3S20zPQtSs0y3HL7Ifj/TuAAJ+JG89qc+6vU7K2CN/0dmyMu
xZ/72mm9fiu2puPTIggA5KSDZ1+WJuRtARjv8o/UE2RX+DGzHoarhg+hwha+tTLHJcEdPecA51AWSyJ2t+a09RN5
Rdb+0Pq4ZM/ygJBjIL8iRi3MJCewbg6wCBUpM0bwQisGwn/baZH6ck/1foSgDjWNqsb0QugUJggECKwHhZVeGHy
SBR4k6xfYUL1Cp8w0tmK5q/+wvwtCldNsGIQ8KSDyze21Xbwsrp06gkbGAAPDj70kTw=

Public key

-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICGKCAgEAE1QL3YyMgeShx8IhTC7jb
sM0w2BnRXgsBn3+SMXKjtwHATqdekmlP1cjayJxD5fcProPPCqp/LouFz5CUZzRi
6+8FTv70dHuIz5A4LAT4vcgwP+iWscPc3HzpmjpsKbTmOemqgp6RB6GNnPxYa5X
7qU95EFeisX/GfoS9ToXtqPBwCcVWSPBX8efec4TC58m96Fsp4mC8KlCeadbIbHN
av0JjdTJ//CM0WZSIbdzE6qvEbNFCqDB5tNU7oHfYvBeNlrvPU9TAqdbtozdhQ+D
AhfTRuJNgWEkjwD5lboVhi4qlkweSOEMTKT3ye9I1L5xEaJn4bku4eKqes7VSZt3o
XbUcmr2H5mKcKsvt6bXmX6ajAmgi900Cm9QJlaQkJM6z2iITnyvDMgueJtFxQpC9
HNBPgPZ242NH8JgE6CNF7ToL9syanS67u7UMgIcNgeNHNcy9bLgPU5annzP9gN2l
6HEMldkXNdKQRb1rDwyEJf3N/50YHnXXPmuf5sb8R/pxWNqtF04R5UGVV92qd2Mi
1GN7LE3mbQRBpSLl/JAPDXMNZNikaFfBsQK7iKxr7ViTaTeZckFZWfThcYNT7Hasg

```
+eE4bf/olCHBCf1VIDCkDxoehdZ0WRRcgM9iK3I/0zZdaBsgdc8WuJRmb8LPP9v
8Jap/1PWjNcNku5cdW3gHLcCAwEAAQ==
-----END PUBLIC KEY-----
```

Run 1 outputs

```
stdout 18aa7513a49a5b7e7b03112885368f540dd6895090bcec067816d1d4cde25db6
stderr 928879c675e1882331043ec6bb70e46fba09cec7ec01d5bcc8f0ba2bae1070cb
metrics 0d37395ee7b6f7bd79760c7bc2972ebba8def78d188fcd5d5175e23d96f58b6b
digest 11862bbde36fd717b7448723d18fa722e0c0d1dd15ebf6d3cc9bd194a92f2e73
kv_run.sh (unchanged)
pre c922151d36674980e3d1eb736e0b983818a9d5fde5bccba5acffb1b1d12c0739
post c922151d36674980e3d1eb736e0b983818a9d5fde5bccba5acffb1b1d12c0739
```

E BibTeX for [1]

```
@misc{keita2026computerscienceconferencesrequire,
  title={Computer Science Conferences Should Require Nonrepudiable Experimental Results},
  author={Mamadou K. Keita and Christopher Homan},
  year={2026},
  eprint={2605.08586},
  archivePrefix={arXiv},
  primaryClass={cs.CR},
  url={https://arxiv.org/abs/2605.08586},
}
```