

Reproduction of IDEA-Research/GroundingDINO: zero-shot COCO detection with GroundingDINO-T

K-Veritas Team

Submitted by K-Veritas Team

kv:2610.00045v1 · Published 2026-10-24

Independent reproduction · Artifact evaluation · Computer vision

Abstract

Ran demo/test_ap_on_coco.py at the pinned commit with the GroundingDINO_SwinT_OGC config and the released groundingdino_swint_ogc.pth weights on all 5000 COCO val2017 images, zero-shot: the 80 category names joined into one text prompt, top 300 boxes per image, box AP from pycocotools. Weight and annotation SHA-256 hashes are printed in the run; bert-base-uncased was cached beforehand and the run was offline. One change to the code: the multi-scale deformable attention CUDA extension (ms_deform_attn_cuda.cu) used value.type() in two AT_DISPATCH macros, which current PyTorch no longer accepts, so it now uses value.scalar_type(); the extension was compiled for this GPU with CUDA 12.8. PyTorch 2.11, transformers 4.49. One NVIDIA RTX 5060 Ti.

About this record

Title, authors and abstract were provided by the authors and reviewed for completeness, not for scientific soundness. Every number in this record is copied from the signed data of the sealed reports [2], which remain authoritative.

This cover page is not signed. Check it against the SHA-256 listed at <https://kveritas.org/records/2610.00045v1>, and verify each report with its code bundle: `kveritas verify <report.pdf> --bundle <bundle.zip>`.

1 Sealed reports

The experiments were sealed with K-Veritas [1], which binds each result to the code, hardware and time that produced it.

Report	Label	Sealed	Runs	Invocations	Signer
r1 [2]	GroundingDINO-T: zero-shot ...	2026-10-11	1	1	Signed by the K-Veritas server

2 Results

r1: GroundingDINO-T: zero-shot COCO val2017

Run	Metric	Final value	Step
1	coco_val2017_ap	0.485	
1	coco_val2017_ap50	0.6442	
1	coco_val2017_ap75	0.5294	
1	coco_val2017_ap_small	0.3392	
1	coco_val2017_ap_medium	0.5178	
1	coco_val2017_ap_large	0.6336	

Run	Inline claim	Value	Phase
1	coco_val2017_ap	0.485	

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1	coco_val2017_ap50	0.6442	
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1	coco_val2017_ap_medium	0.5178	
1	coco_val2017_ap_large	0.6336	

3 Setup

Report	Item	Value
r1	Operating system	linux / amd64
r1	CPU	Intel(R) Xeon(R) W-2145 CPU @ 3.70GHz, 16 cores
r1	GPU	NVIDIA GeForce RTX 5060 Ti, 16311 MiB
r1	Memory	31.0 GB
r1	Total run time	1203.0 s

4 Files

Each report and code bundle must hash to these values. A bundle belongs to the report whose signed data names its hash.

File	SHA-256	Size
r1.pdf	d28d1b81b7fb1c65ef3ffa23cfadf92055baae2ff4934e96c5ed5f507f393295	6.7 MB
r1.kvbundle.zip	b8d807082cc966a5073b7329cfee5d5591f02e71253d24c004a1a7cff8a9558d	2.8 MB

5 Links and licence

Paper: <https://arxiv.org/abs/2303.05499>

Reproduction of:

<https://github.com/IDEA-Research/GroundingDINO/tree/856dde20aee659246248e20734ef9ba5214f5e44>

Record: CC-BY 4.0. Code: Apache-2.0, as declared by the authors. Tags: open-set-detection, zero-shot, grounding, coco.

Listed, not endorsed. Review checks the artifact, never the science. Reports are never edited; changing them makes a new version. Other fields are corrected in place, and every correction is logged in metadata.yaml.

References

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

[2] Sealed experiment report r1 (GroundingDINO-T: zero-shot COCO val2017), kv:2610.00045v1/r1. Data hash 691cffa200af6c0575a879ea5b1ca268e4e10591af7286339b9b4bab146559bf.
<https://kveritas.org/records/2610.00045v1/r1.pdf>