

B-FREE: A BIAS-FREE TRAINING PARADIGM FOR SYNTHETIC IMAGE DETECTION

developed by UNINA

AIM OF THE TOOL B-Free is a synthetic image detector based on a novel bias-free training paradigm. In this approach, fake images are generated from real ones using the conditioning procedure of stable diffusion models. This ensures semantic alignment between real and fake images, so that any differences arise solely from the subtle artifacts introduced by AI generation. Through content-based augmentation, B-Free achieves outstanding generalization and robustness.

MORE INFORMATION

Research paper:

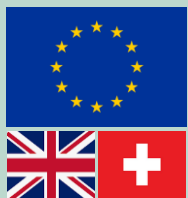
arxiv.org/abs/2412.17671

Project page:

<https://grip-unina.github.io/B-Free/>

ACCESS TO THE TOOL The python code of tool is publicly available on github at <https://github.com/grip-unina/B-Free>

CONTACT University of Naples, DIETI, www.dieti.unina.it
Luisa Verdoliva luisa.verdoliva@unina.it



The vera.ai project has been co-financed by the European Union, Horizon Europe programme, Grant Agreement No 101070093.
Additional funding from Innovate UK grant No 10039055 and the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract No 22.00245

