

May 6, 2021

Dear Editors,

We hereby send you our manuscript entitled “A Simple and Strong Baseline for Universal Targeted Attacks on Siamese Visual Tracking”, which we wish to be considered for publication in *IEEE Transactions on Circuits and Systems for Video Technology*. In the manuscript, we propose a new attack method for Siamese object trackers. We show the existence of universal perturbations that can enable the targeted attack, e.g., forcing a tracker to follow the ground-truth trajectory with specified offsets, to be video-agnostic and free from inference in a network. The proposed perturbations are not only universal across videos, but also generalize well across different trackers. By studying the attack method of Siamese trackers, we argue that the disadvantage of Siamese trackers is that template matching-based tracking mechanism is vulnerable to attacks, i.e., if both the template and the search image are perturbed at the same time, then the tracking algorithm can easily be misled.

Thank you very much for your consideration. We look forward to hearing from you.

Yours Sincerely,

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