

Taking a Closer Look at Synthesis: Fine-grained Attribute Analysis for Person Re-Identification

Suncheng Xiang¹, Yuzhuo Fu¹, Guanjie You², Ting Liu¹

¹School of Electronic Information and Electrical Engineering, Shanghai Jiao Tong University ²College of Intelligence Science and Technology, National University of Defense Technology

Introduction

In this paper, we propose to analyze the influences of different attributes based on GPR+ dataset in a fine-grained manner. To our best knowledge, we are among the first attempts to explicitly dissect person re-ID from the aspect of attribute on synthetic dataset. This research helps us have a deeper understanding of the fundamental problems in person re-ID, which also provides useful insights for dataset building and future practical usage.

GPR+ Dataset

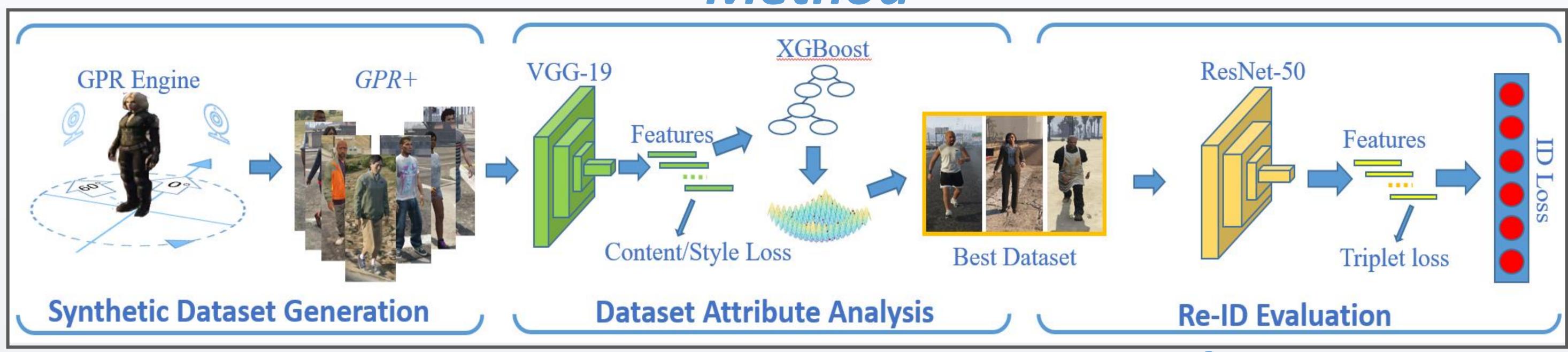




GPR+ (summer)

GPR+ (winter)

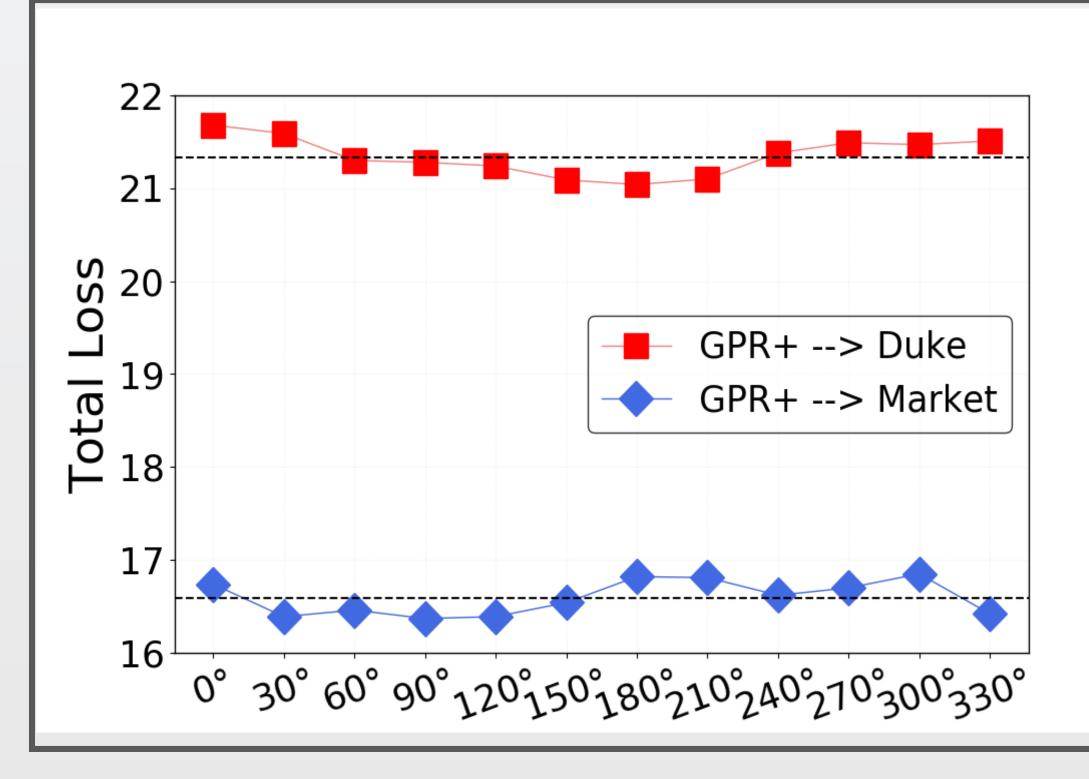
Method

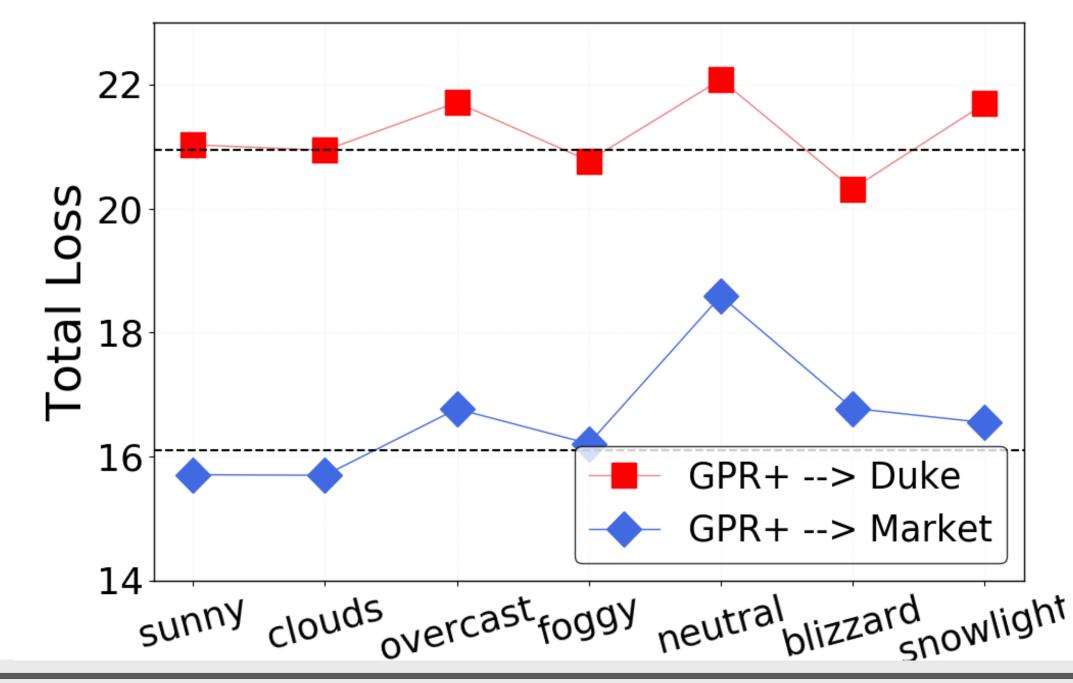


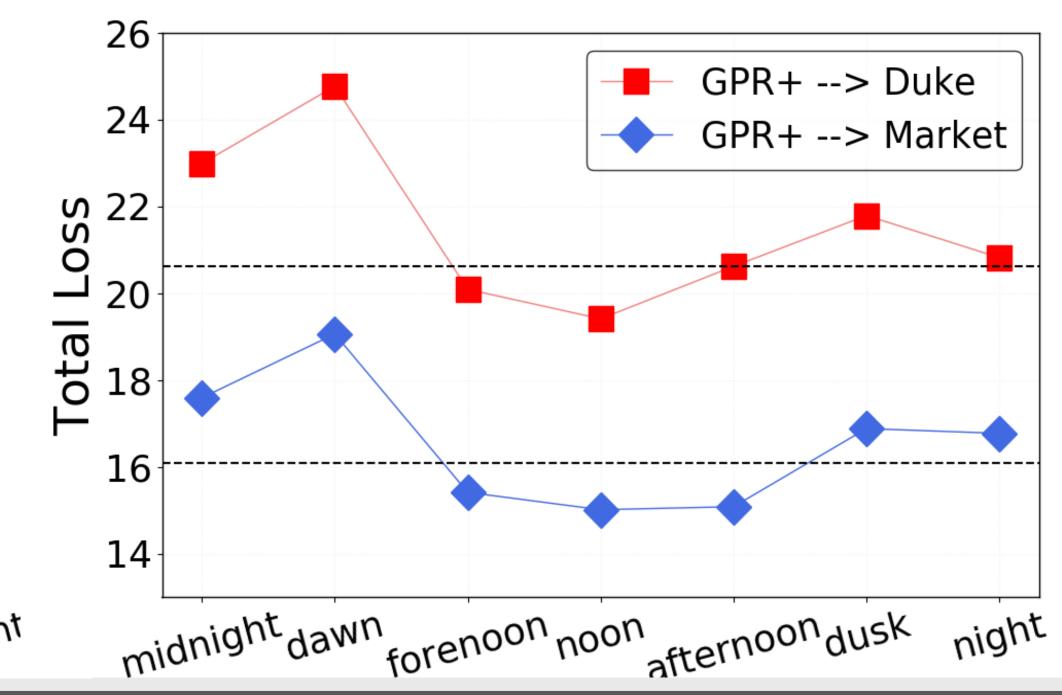
Conclusion

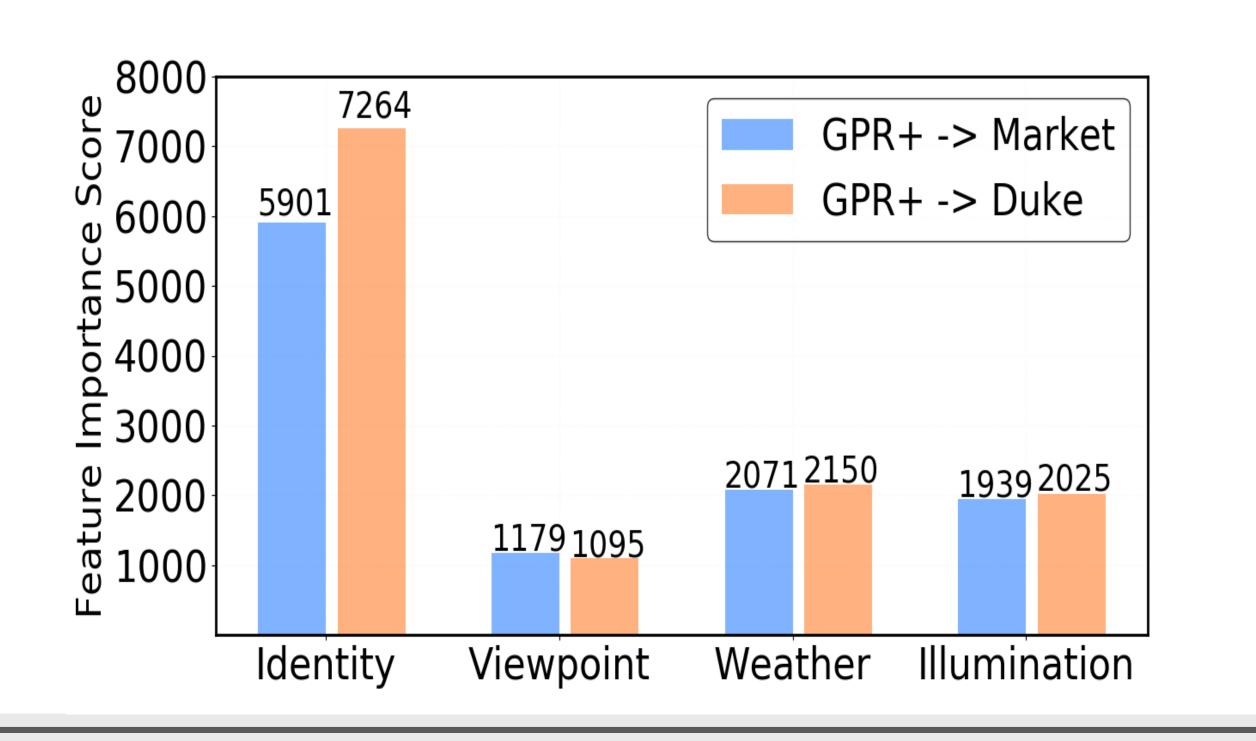
- With only one individual attribute constraint can obtain a more satisfactory.
- A simply combination of several attributes cannot always guarantee the most optimal attributes for re-ID task.
- Using more IDs as training samples is always beneficial to the system.

Results









Home page: https://JeremyXSC.github.io/

Project page: https://JeremyXSC.github.io/GPR/