



Color Transfer Between Images

Student: Ip Hei Man

Supervisor: A/P He Ying

Project Objectives:

- To implement and evaluate previous Color Transfer algorithms
- To propose a Regional Color Transfer algorithm involving Deep Learning

Previous Work:

- Color Transfer using Mean and Standard Deviation

Original



Target



Output



- Color Transfer using N-Dimensional Probability Density Function Transfer

Original



Target



Output



Proposed Algorithm:

- Perform foreground-background segmentation with pretrained ResNet101 FCN
- Generate background Superpixels with efficient graph-based segmentation
- Segment background Superpixels into 'Sky', 'Vertical' and 'Ground' classes using Boosted Decision Tree
- Perform Color Transfer in each class

Original



Target



Output

