Explicit Fashion Retrieval via EI Tree

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Fashion Retrieval Scenarios

- Fashion retrieval has attracted a lot of interest lately. Many successful commercial systems have been running fashion search.
  - text based methods → products with rich details hard to comprehensively describe
  - Image based method → modify certain details

Way of modeling these details
• **Exclusive & Independent Tree (EI Tree)**
  
  — **Exclusive relations**, e.g. red, black, yellow
  
  — **Independent relationships**, e.g. bow, ruffle
  
  — Handles the relationships between categories and attributes of fashion items, captures domain knowledge.
  
  e.g. up shirt vs bottom jean; up (neckline, sleeve); all (color)
Explicit Representation

Attention localization & EI Tree

Description
- Add classic sophistication to any ensemble with this soft pink trench coat, featuring a relaxed, tailored fit...

Product features
- Tailored, relaxed fit
- Self-tie belt
- Double-breasted fastening
- Mother-of-pearl buttons
- Front functional jet pockets

grid feature vectors

EL Tree transfer

direct attribute manipulation
Similarity of sub-EI Trees: with explicit vector representation, the similarity metric is no longer the ones such as Euclidian distance which assumes dimension independence.
THANK YOU

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