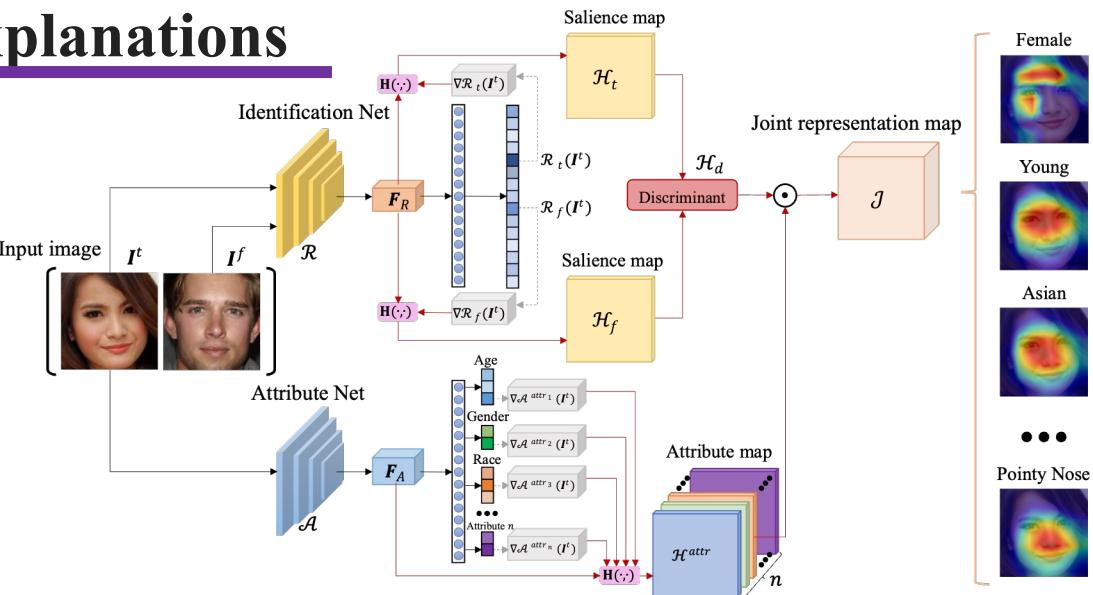
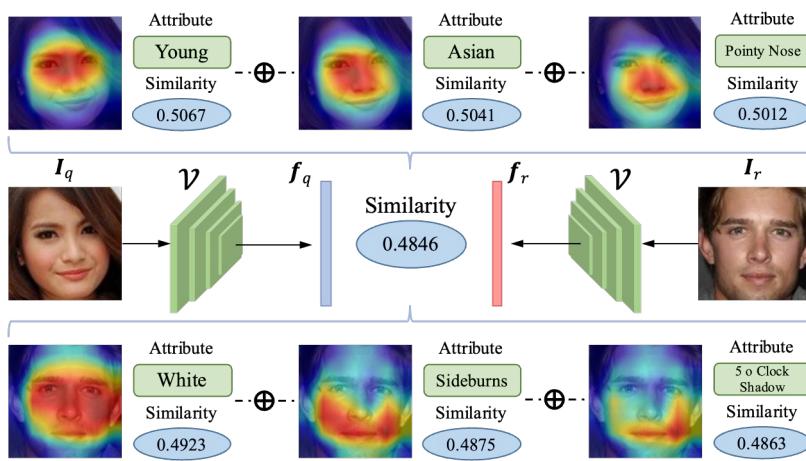


Explaining Similarity with Representative Attribute Words via Counterfactual Explanations



Sim2Word is a novel explanation model for the **visual similarity task**, which aims to explain similarity scores with a visual attribute set and provide visual evidence and semantic descriptions.

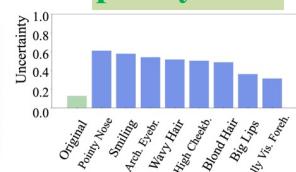
Sim2Word interprets model via

- Salience Maps
- Textual Description
- Numerical Score



What regions does the model focus on?

The most characteristic attribute is the **pointy nose**



Top-5 most characteristic attribute

5 o Clock Shadow
Black
Brown Eyes
Square Face
Sideburns



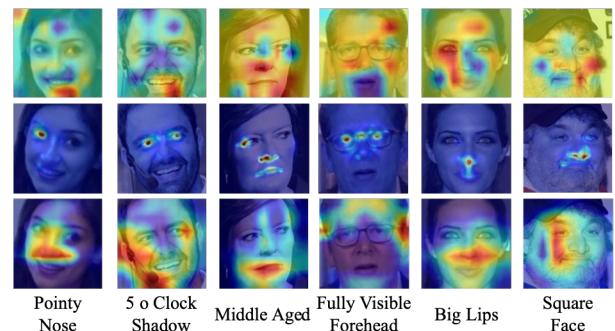
No beard
Young
Female
High Cheekbones
Asian

SOTA methods comparison

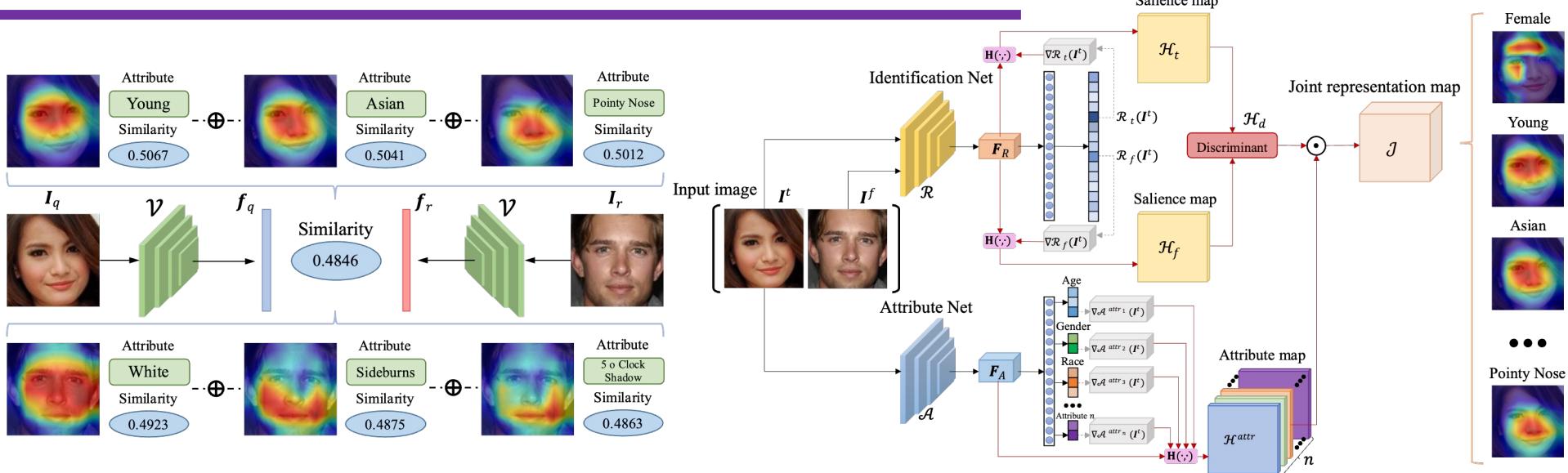
$xCos$

Williford *et al.*

Ours



通过反事实解释与代表性属性词解释相似性



Sim2Word 是一种新颖的视觉相似度任务解释模型，旨在用视觉属性集解释相似度得分，并提供视觉证据和语义描述。

Sim2Word 模型提供的解释包括：

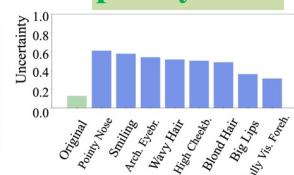
➤ 显著图



What regions does the model focus on?

➤ 文本描述

The most characteristic attribute is the **pointy nose**



前五个最具代表性的面部属性

5 o Clock Shadow
Black
Brown Eyes
Square Face
Sideburns



No beard
Young
Female
High Cheekbones
Asian

最先进方法比较 Williford et al.

Ours

