



# Memorability and More

CS535

Daniel G. Aliaga

Department of Computer Science

Purdue University

What makes a picture memorable?

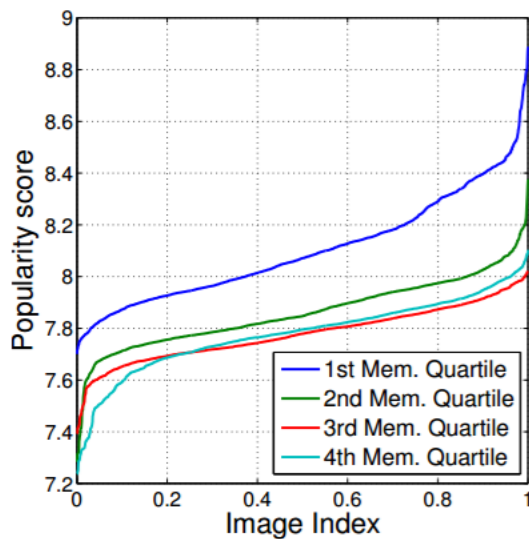


# Most memorable images: (top-left is most memorable...)

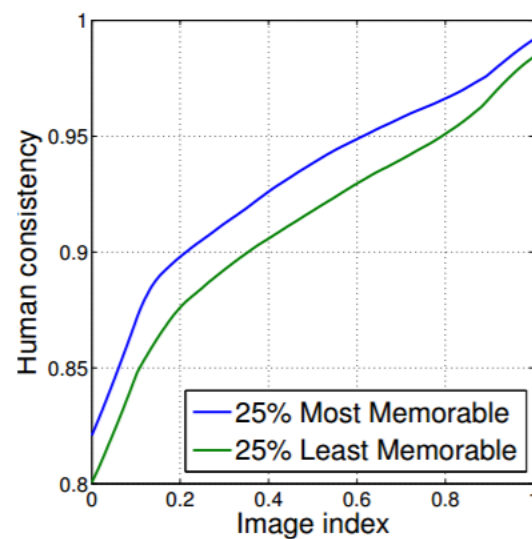


[Khosla et al. 2015]

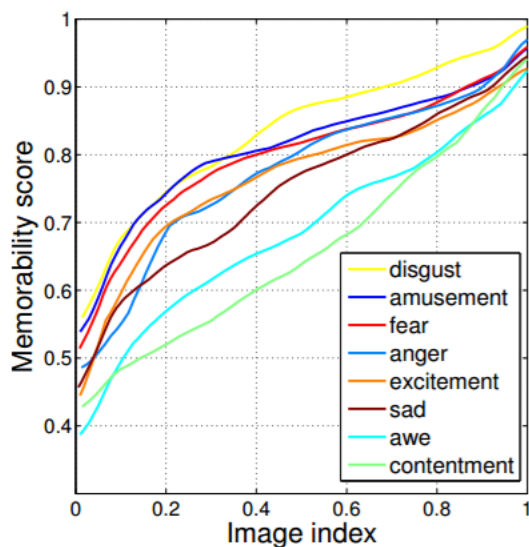
<http://memorability.csail.mit.edu/>



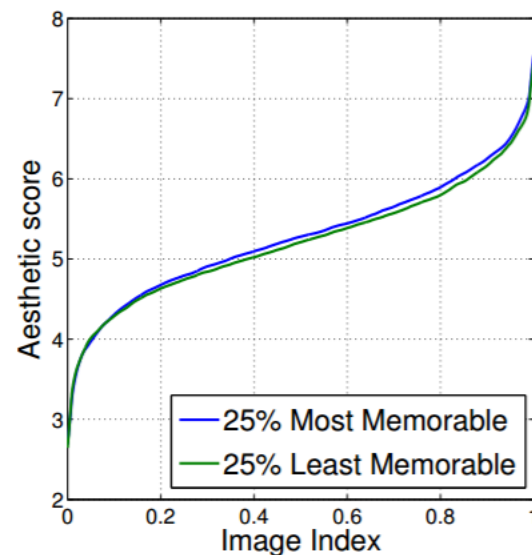
(a) Memorability vs popularity



(b) Memorability vs saliency



(c) Memorability vs emotions

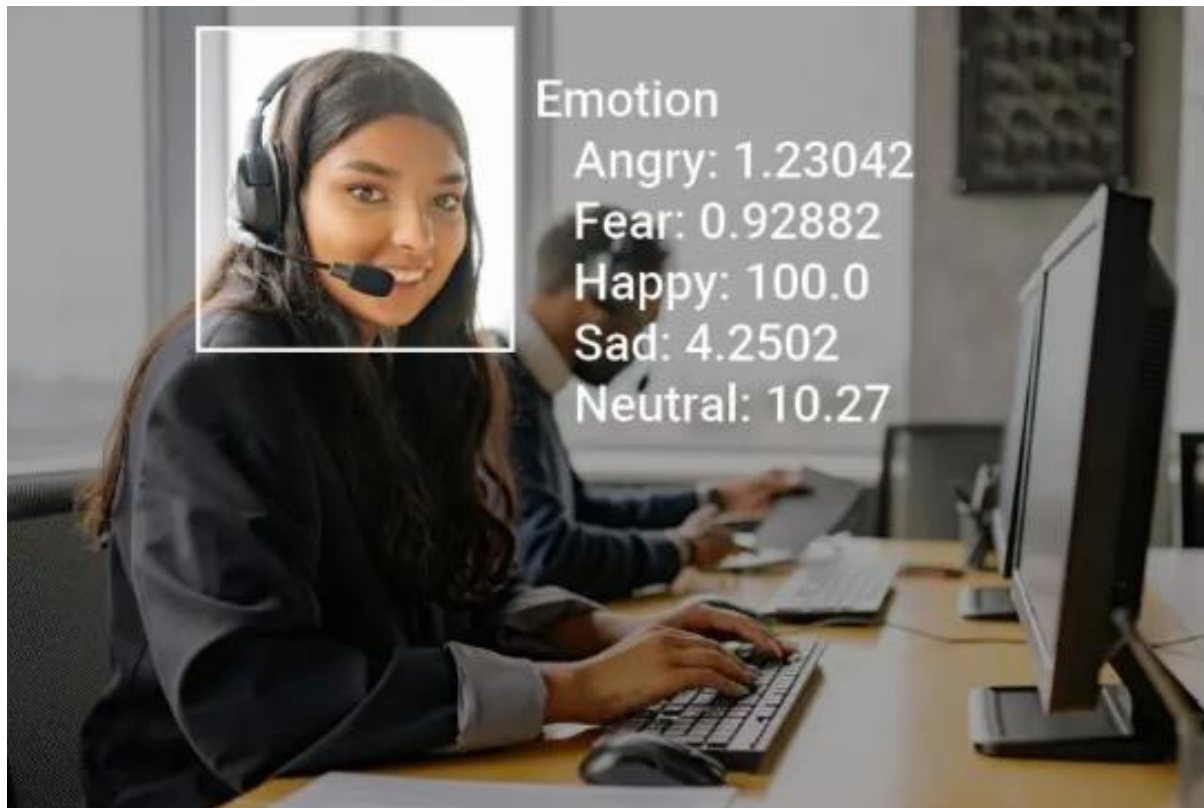


(d) Memorability vs aesthetics



# AI-Based Emotion Recognition

- <https://viso.ai/deep-learning/visual-emotion-ai-recognition/>
- [https://openaccess.thecvf.com/content/CVPR2023W/LatinX/papers/de\\_Lima\\_Costa\\_High-Level\\_Context\\_Representation\\_for\\_Emotion\\_Recognition\\_in\\_Images\\_CVPRW\\_2023\\_paper.pdf](https://openaccess.thecvf.com/content/CVPR2023W/LatinX/papers/de_Lima_Costa_High-Level_Context_Representation_for_Emotion_Recognition_in_Images_CVPRW_2023_paper.pdf)







# EmoGen: Emotional Image Content Generation with Text-to-Image Diffusion Models

- [https://openaccess.thecvf.com/content/CVPR2024/papers/Yang\\_EmoGen\\_EmoGen\\_EmoGen\\_Content\\_Generation\\_with\\_Text-to-Image\\_Diffusion\\_Models\\_CVPR\\_2024\\_paper.pdf](https://openaccess.thecvf.com/content/CVPR2024/papers/Yang_EmoGen_EmoGen_EmoGen_Content_Generation_with_Text-to-Image_Diffusion_Models_CVPR_2024_paper.pdf)

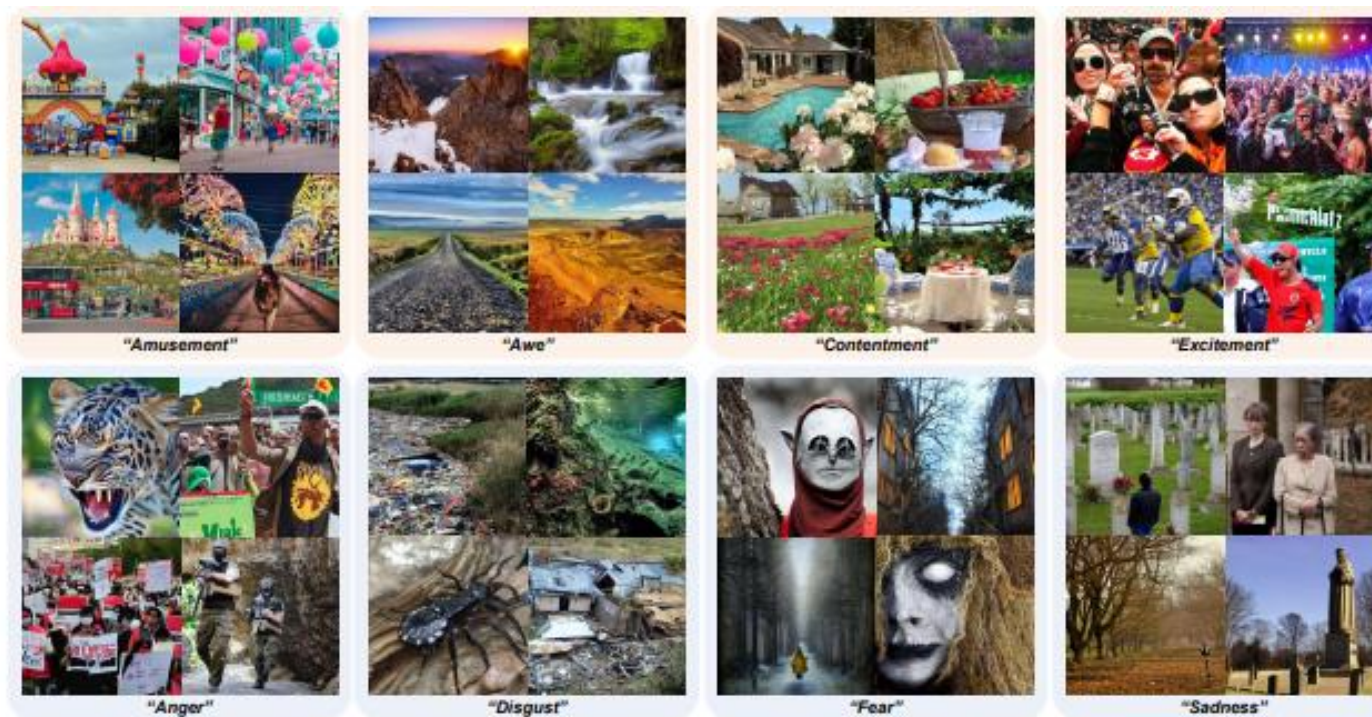


Figure 1. Emotional Image Content Generation (EICG). Given an emotion category, our network produces images that exhibit unambiguous meanings (*semantic-clear*), reflect the intended emotion (*emotion-faithful*) and incorporate varied semantics (*semantic-diverse*).



# and More...

Mood Determination: urgency, emergency?

