CVPR *Nashville*

JUNE 11-15, 2025

What Topics in Regards to Structure Identification are you most interested in?
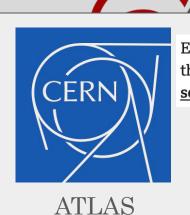
Presenting with animations, GIFs or speaker notes? Enable our Chrome extension

slido

The Era of Big and Bigger Data

VISUAL GENOME

YFC100M

Laion-5B

ImageNet

IMAGENET

CC12M

Laion-400M

The Era of Big and Bigger Data

ATLAS

Every time one tiny subatomic particle smashes into another during experiments at the LHC, the impact generates staggering volumes of data – **about one petabyte per second**. That's enough to fill 220,000 DVDs.
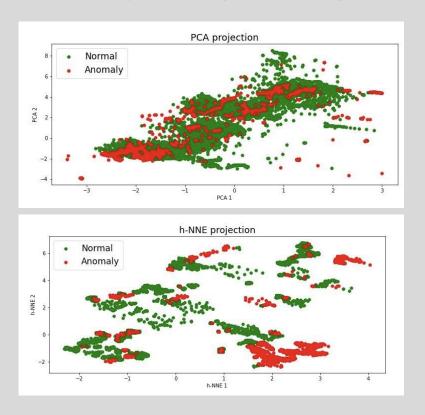
Even in a filtered state,
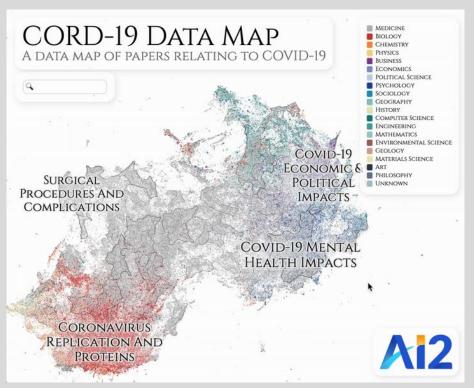run 2 produced >5B captured events

IMAGENET

Analysing Large Datasets

https://github.com/TutteInstitute/datamapplot
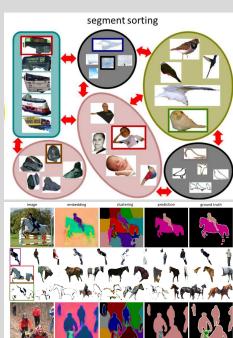
Applications within Computer Vision

Eigenfaces for Recognition, Turk and Pentland, Journal of Cognitive Neuroscience 1991 https://de.wikipedia.org/wiki/Eigengesicht

DINOv2: Learning Robust Visual Features without Supervision, Oquab et al. ICLR 2023 https://github.com/facebookresearch/dinov2
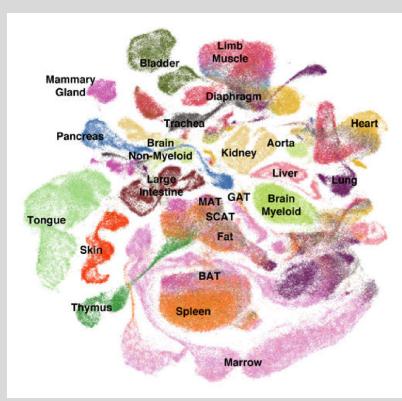
SLIC Superpixels Compared to State-of-the-art Superpixel Methods, Achanta et al. TPAMI 12
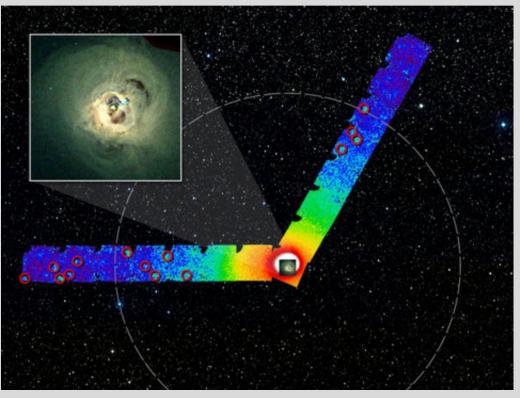
SegSort: Segmentation by Discriminative Sorting of Segments, Hwang et al. ICCV19

Applications to other domains

A Single Cell Transcriptomic Atlas Characterizes Aging Tissues
in the Mouse, *Nature 2020*

https://xoc.stanford.edu/introduction/galaxy-cluster-astrophysics

Awesome
Clustering

Awesome
Dimensionality
Reduction

Audience Q&A

Feedback

MeetUp Location:
Bakersfield Nashville
6 PM

Self-pay invitation