



# DLWP- Proposal

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## Motivation

Deep Learning -> good at large data

Machine Learning -> better at small data

difficult to extract the features from images for ML data

# Dataset (~2000)

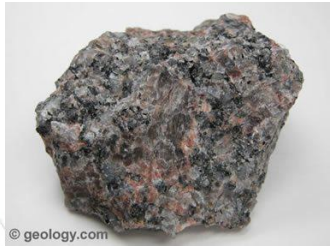
<https://www.kaggle.com/salmaneunus/rock-classification>



Basalt



Marble



Granite



Quartzite



Coal



Limestone

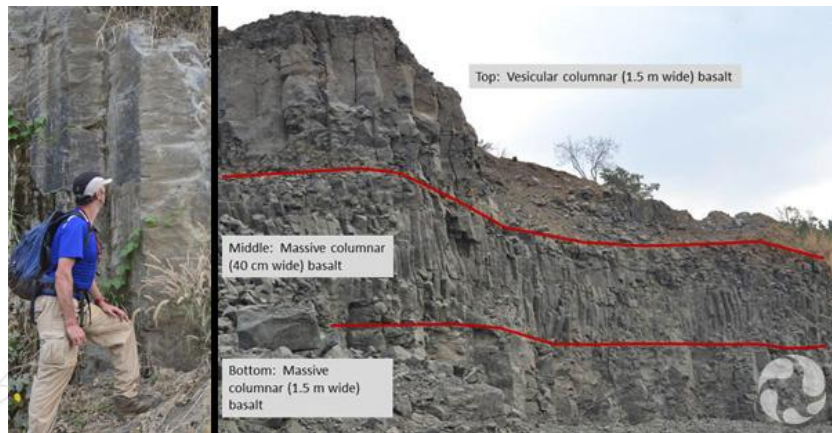


Sandstone

Igneous

Metamorphic

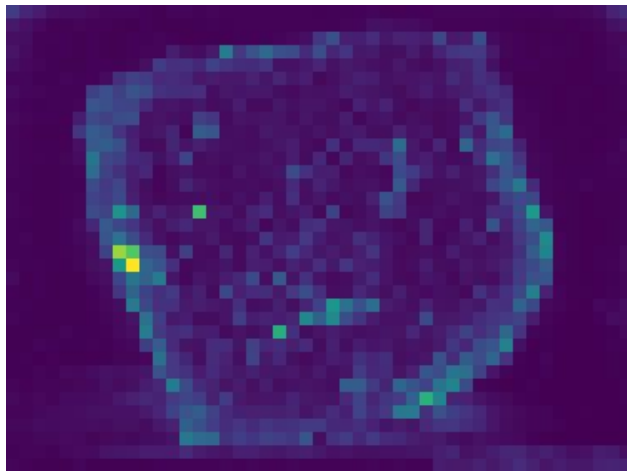
Sedimentary



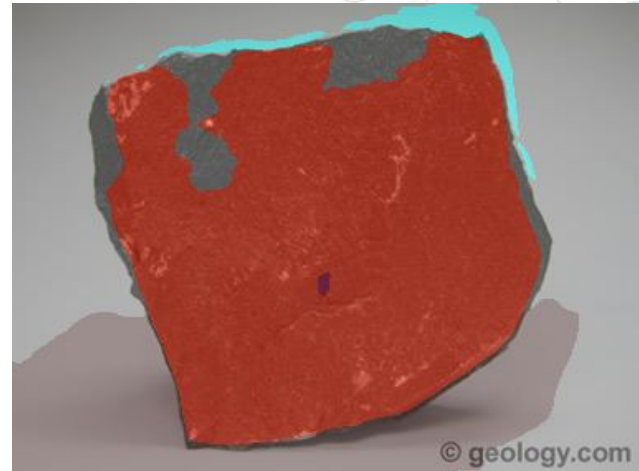
## Processing



Original



Attention Map



Segmentation

For ML: RGB rates, Hue, Saturation, Gradient



# Emerging Properties in Self-Supervised Vision Transformers

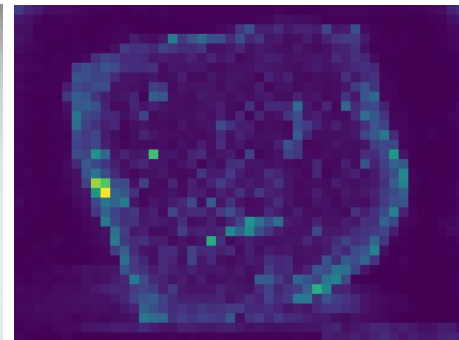
<https://arxiv.org/pdf/2104.14294>

Self-Supervised Vision Transformers with DINO

<https://github.com/facebookresearch/dino>



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## Workflow

