AQC0426

Nanopublication — Computational Image Analysis - AQC0426

by Arnaud Quercy · The Cat Of Istanbul - Variations 4 · 2023

Claim 1: Computational Image Analysis - AQC0426

> K-means clustering analysis [3] (10 colors) performed on artwork The [1] Cat Of Istanbul - Variations 4 (AQC0426) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 1492x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C19F89	35.2	orange	rosybrown
2		B79479	20.4	orange	ochre
3		CDAB97	14.9	orange	tan
4		97815A	7.4	yellow-orange	gray
5		716449	5.2	yellow-orange	dimgray
6		69726E	4.7	gray	dimgrey
7		91613A	3.4	orange	burnt sienna
8		404D50	3.4	blue	darkslategray
9		53412E	3.4	orange	dark brown
10		2C2016	2.0	orange	very dark gray
11		13442E	0.3	yellow-green	darkslategray [Accent]
12		76261D	0.3	red-orange	russet [Accent]
13		1C2C40	0.3	blue-violet	very dark indigo [Accent]

Color Families:

Family	%
orange	79.3
yellow-orange	12.6
gray	4.7
blue	3.4
yellow-green	0.3
red-orange	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
13442E	yellow-green	darkslategray	23.8
76261D	red-orange	russet	42.2
1C2C40	blue-violet	very dark indigo	15.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.139
Mean Local Roughness	0.019
Roughness Uniformity	0.02
Edge Density	0.088
Mean Gradient Magnitude	0.147
Gradient Variance	0.041
Gradient Smoothness	0.0
Directional Coherence	0.015
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.638
Spatial Variation	0.072
Texture Consistency	0.646

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.576
Brightness Variance	0.139
Brightness Uniformity	0.759
Brightness Skewness	-1.4
Brightness Entropy	6.578
Rms Contrast	0.139
Michelson Contrast	1.0
Weber Contrast	0.477
Mean Local Contrast	0.019
Contrast Uniformity	0.016
Dynamic Range	0.996
Effective Dynamic Range	0.435
Shadow Percentage	7.997
Midtone Percentage	65.676
Highlight Percentage	26.327
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.025
Coarse Contrast	0.036
Multiscale Contrast Ratio	0.301
Edge Contrast	0.147
Contrast Clustering	0.354

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.713
Color Clustering	0.701

Metric	Value
Color Transition Smoothness	0.623
Transition Uniformity	0.726
Sharp Transition Ratio	0.1
Transition Directionality	0.015
Mean Saturation	0.323
Saturation Variance	0.015
Low Saturation Ratio	0.445
Medium Saturation Ratio	0.54
High Saturation Ratio	0.015
Saturation Clustering	0.999
Hue Concentration	0.931
Complementary Balance	0.02
Analogous Dominance	0.966
Temperature Bias	0.935

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

[1] Arnaud Quercy (2023). The Cat Of Istanbul - Variations 4 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0426.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/the-cat-of-istanbul-variations-4_4tw.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

70fddca6a6ead2ab1c2b027e8faa2834569831f1926a9dacebeb0e9ab-d6682e6

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