AQC0420

Nanopublication — Computational Image Analysis - AQC0420

by Arnaud Quercy · The Cat Of Istanbul - Variations 1 · 2023

Claim 1: Computational Image Analysis - AQC0420

> Computational image analysis [3] of artwork The [1] Cat Of Istanbul - Variations 1 (AQC0420) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2026-02-04.

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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		CC8B82	21.0	red-orange	rosybrown
2		AE756C	16.5	red-orange	indianred
3		D4805D	11.4	orange	peru
4		A65D44	11.1	red-orange	burnt sienna
5		E0AA97	11.0	orange	tan
6		7B888E	7.8	blue	lightslategray
7		5C676B	7.8	blue	dimgray
8		71442C	5.2	orange	russet
9		9EAFBB	4.8	blue	steel gray
10		253643	3.5	blue-violet	grayish purple
11		320B13	0.3	red	very dark red [Accent]
12		E3C26F	0.3	yellow-orange	burlywood [Accent]
13		0C5F53	0.3	green	darkslategray [Accent]
14		224689	0.3	violet	darkslateblue [Accent]
15		7A7E39	0.3	yellow	olivedrab [Accent]

Color Families:

Family	%
red-orange	48.6
orange	27.6
blue	20.3
blue-violet	3.5
red	0.3
yellow-orange	0.3
green	0.3
violet	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
320B13	red	very dark red	19.6
E3C26F	yellow-orange	burlywood	46.0
0C5F53	green	darkslategray	26.0
224689	violet	darkslateblue	42.7
7A7E39	yellow	olivedrab	38.9

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.135
Mean Local Roughness	0.039
Roughness Uniformity	0.016
Edge Density	0.298
Mean Gradient Magnitude	0.302
Gradient Variance	0.039
Gradient Smoothness	0.345
Directional Coherence	0.005
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.656
Spatial Variation	0.043
Texture Consistency	0.731

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.539
Brightness Variance	0.135
Brightness Uniformity	0.749
Brightness Skewness	-0.625
Brightness Entropy	7.093
Rms Contrast	0.135
Michelson Contrast	1.0
Weber Contrast	0.48
Mean Local Contrast	0.04
Contrast Uniformity	0.646
Dynamic Range	0.996
Effective Dynamic Range	0.447
Shadow Percentage	7.671
Midtone Percentage	75.971
Highlight Percentage	16.358
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.023
Medium Contrast	0.049
Coarse Contrast	0.064
Multiscale Contrast Ratio	0.359

Metric	Value
Edge Contrast	0.302
Contrast Clustering	0.269

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.674
Color Clustering	0.494
Color Transition Smoothness	0.242
Transition Uniformity	0.754
Sharp Transition Ratio	0.1
Transition Directionality	0.006
Mean Saturation	0.397
Saturation Variance	0.032
Low Saturation Ratio	0.266
Medium Saturation Ratio	0.675
High Saturation Ratio	0.058
Saturation Clustering	0.999
Hue Concentration	0.755
Complementary Balance	0.11
Analogous Dominance	0.876
Temperature Bias	0.763

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 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0420.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/the-cat-of-istanbul-variations-1_4rk.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

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a979ef67211de2c606102aa88d77d56a318ac90f10b-f258043af2d090467c188

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