AQC0687

Nanopublication — Computational Image Analysis - AQC0687

by Arnaud Quercy · C# Fourth Interval - Reflexions 21 · 2024

Claim 1: Computational Image Analysis - AQC0687

> K-means clustering analysis [3] (10 colors) performed on artwork C# Fourth [1] Interval - Reflexions 21 (AQC0687) [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]: 1920x2560 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D4D8D9	21.0	white	lightgray
2		CBC9C2	19.2	white	silver
3		B7B6AF	14.9	gray	steel gray
4		9DA09F	10.8	gray	steel gray
5		4A4E52	9.2	gray	grayish purple
6		80868C	8.0	gray	grayish purple
7		63666B	6.5	gray	grayish purple
8		AEC3CB	6.0	blue	lightsteelblue
9		6A99A8	3.3	blue	cadetblue
10		2B2D30	1.1	gray	very dark gray
11		896153	0.3	orange	dimgray [Accent]
12		7DC2D3	0.3	blue-green	skyblue [Accent]
13		916A60	0.3	red-orange	dimgray [Accent]

Color Families:

Family	%
gray	50.5
white	40.2
blue	9.3
orange	0.3
blue-green	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
896153	orange	dimgray	20.5
7DC2D3	blue-green	skyblue	22.7
916A60	red-orange	dimgray	18.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.181
Mean Local Roughness	0.019
Roughness Uniformity	0.02
Edge Density	0.087
Mean Gradient Magnitude	0.159
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.002
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.622
Spatial Variation	0.132
Texture Consistency	0.516

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.664
Brightness Variance	0.181
Brightness Uniformity	0.728
Brightness Skewness	-0.933
Brightness Entropy	7.149
Rms Contrast	0.181
Michelson Contrast	1.0
Weber Contrast	0.581
Mean Local Contrast	0.021
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.565
Shadow Percentage	8.243
Midtone Percentage	30.041
Highlight Percentage	61.716
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.026
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.266
Edge Contrast	0.159
Contrast Clustering	0.484

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.731
Color Clustering	0.902

Metric	Value
Color Transition Smoothness	0.599
Transition Uniformity	0.706
Sharp Transition Ratio	0.1
Transition Directionality	0.003
Mean Saturation	0.091
Saturation Variance	0.007
Low Saturation Ratio	0.963
Medium Saturation Ratio	0.036
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.929
Complementary Balance	0.023
Analogous Dominance	0.976
Temperature Bias	-0.941

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 (2024). C# Fourth Interval - Reflexions 21 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0687.html

[2] Quercy, A. (2024). C# Fourth Interval - Reflexions 21 - Gallery. https://artquamanima.com/en/artworks/2024/01/c-fourth-interval-reflexions-21_7ne.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)

62383ad531b6fb22fa740481237c0ef449165373f0c0b8cd8b637d2950d-ff042

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