AQC0683

Nanopublication — Computational Image Analysis - AQC0683

by Arnaud Quercy · Tritone (D, G#) - Reflexions 17 · 2024

Claim 1: Computational Image Analysis - AQC0683

> K-means clustering analysis [3] (10 colors) performed on artwork Tritone [1] (D, G#) - Reflexions 17 (AQC0683) [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]: 2612x3483 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C7B9C8	21.5	red-violet	silver
2		C2ADB6	17.7	red	steel gray
3		CAC7DB	14.2	violet	thistle
4		A48B8D	12.9	red	rosybrown
5		B39C9F	11.3	red	steel gray
6		93797C	10.5	red	gray
7		85615F	4.1	red-orange	dimgray
8		6A6678	3.8	violet	dusty mauve
9		4F475A	3.0	violet	dusty mauve
10		17142C	1.0	violet	very dark purple
11		1D3358	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
red	52.3
violet	22.0
red-violet	21.5
red-orange	4.1
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
1D3358	blue-violet	grayish purple	25.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.143
Mean Local Roughness	0.018
Roughness Uniformity	0.018
Edge Density	0.091
Mean Gradient Magnitude	0.151
Gradient Variance	0.036
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.125
Pattern Repetition	1.0
Detail Frequency Ratio	0.62
Spatial Variation	0.084
Texture Consistency	0.554

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.643
Brightness Variance	0.143
Brightness Uniformity	0.778
Brightness Skewness	-1.205
Brightness Entropy	6.888
Rms Contrast	0.143
Michelson Contrast	1.0
Weber Contrast	0.43
Mean Local Contrast	0.019
Contrast Uniformity	0.063
Dynamic Range	0.98
Effective Dynamic Range	0.431
Shadow Percentage	3.299
Midtone Percentage	41.12
Highlight Percentage	55.581
Shadow Clipping	0.005
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.024
Coarse Contrast	0.038
Multiscale Contrast Ratio	0.265
Edge Contrast	0.151
Contrast Clustering	0.446

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.71
Color Clustering	0.837
Color Transition Smoothness	0.615
Transition Uniformity	0.757
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.144

Metric	Value
Saturation Variance	0.01
Low Saturation Ratio	0.945
Medium Saturation Ratio	0.047
High Saturation Ratio	0.007
Saturation Clustering	0.999
Hue Concentration	0.734
Complementary Balance	0.0
Analogous Dominance	0.826
Temperature Bias	0.709

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). Tritone (D, G#) - Reflexions 17 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0683.html

[2] Quercy, A. (2024). Tritone (D, G#) - Reflexions 17 - Gallery. https://artquamanima.com/en/artworks/2024/01/tritone-d-g-reflexions-17_7lu.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)

1a19bbfa92a1beb7cd-d3b2129744f2223d12b62890e52cd89e45f69052368624

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