

Nanopublication — Computational Image Analysis - AQC0684

by Arnaud Quercy · Tritone (D, G#) - Reflexions 18 · 2024

Claim 1: Computational Image Analysis - AQC0684

The artwork Tritone [1] (D, G#) - Reflexions 18 (AQC0684) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

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]: 2588x3451 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	DEBEA2	23.3	orange	tan
2	DCCABE	16.4	orange	lightgray
3	C2B3B2	13.1	red-orange	silver
4	D68351	9.0	orange	peru
5	A69898	8.8	red-orange	steel gray
6	56555D	7.9	gray	dusty mauve
7	DC9E7E	6.9	orange	darksalmon
8	907569	6.5	orange	gray
9	617689	4.9	blue-violet	grayish purple
10	403637	3.1	red	darkslategray
11	295364	0.3	blue	darkslategray [Accent]
12	8285AA	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
orange	62.1
red-orange	21.9
gray	7.9
blue-violet	4.9
red	3.1
blue	0.3
violet	0.3

Accent Colors:

Hex	Family Name	Chroma
295364	blue	darkslategray 16.6
8285AA	violet	dusty mauve 21.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.164
Mean Local Roughness	0.01
Roughness Uniformity	0.014
Edge Density	0.029
Mean Gradient Magnitude	0.098
Gradient Variance	0.03
Gradient Smoothness	0.0
Directional Coherence	0.025
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.593
Spatial Variation	0.116
Texture Consistency	0.596

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.65
Brightness Variance	0.164
Brightness Uniformity	0.748
Brightness Skewness	-1.037
Brightness Entropy	6.991
Rms Contrast	0.164
Michelson Contrast	1.0
Weber Contrast	0.527
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	0.965
Effective Dynamic Range	0.51
Shadow Percentage	6.399
Midtone Percentage	35.477
Highlight Percentage	58.124
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005
Medium Contrast	0.015
Coarse Contrast	0.028
Multiscale Contrast Ratio	0.187
Edge Contrast	0.098
Contrast Clustering	0.404

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.733
Color Clustering	0.683

Metric	Value
Color Transition Smoothness	0.744
Transition Uniformity	0.796
Sharp Transition Ratio	0.1
Transition Directionality	0.038
Mean Saturation	0.256
Saturation Variance	0.027
Low Saturation Ratio	0.704
Medium Saturation Ratio	0.284
High Saturation Ratio	0.012
Saturation Clustering	1.0
Hue Concentration	0.76
Complementary Balance	0.078
Analogous Dominance	0.879
Temperature Bias	0.769

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 18 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0684.html>
- [2] Quercy, A. (2024). Tritone (D, G#) - Reflexions 18 - Gallery. https://artquamanima.com/en/artworks/2024/01/tritone-d-g-reflexions-18_7m8.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

4e92c6364af462fe41a538e432f5d1a02eed1b83a7ef4c49993bd-dde21a7d993

Artist Arnaud Quercy

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