

Nanopublication — Computational Image Analysis - AQC0586

by Arnaud Quercy · C# Major - Research on Harmony · 2024

Claim 1: Computational Image Analysis - AQC0586

The artwork C# Major [1] - Research on Harmony (AQC0586) [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]: 2647x3530 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	69C7AA	33.4	green	mediumaquamarine
2	542022	25.1	red-orange	maroon
3	85D6BE	12.6	green	skyblue
4	71AFC2	6.8	blue	cadetblue
5	67A597	6.8	green	lightslategray
6	B5F2E1	5.5	green	paleturquoise
7	3E6082	4.4	blue-violet	grayish purple
8	6B3E41	2.9	red-orange	dark brown
9	0F1012	1.5	black	black
10	C7AF9D	0.9	orange	tan
11	082F7E	0.3	violet	indigo [Accent]
12	304134	0.3	yellow-green	darkslategray [Accent]
13	8F8F6A	0.3	yellow	gray [Accent]
14	3F5557	0.3	blue-green	darkslategray [Accent]

Color Families:

Family	%
green	58.3
red-orange	28.1
blue	6.8
blue-violet	4.4
black	1.5
orange	0.9
violet	0.3
yellow-green	0.3
yellow	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
082F7E	violet	indigo	52.4
304134	yellow-green	darkslategray	11.7
8F8F6A	yellow	gray	20.9
3F5557	blue-green	darkslategray	8.9

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.235
Mean Local Roughness	0.028
Roughness Uniformity	0.03
Edge Density	0.12
Mean Gradient Magnitude	0.216
Gradient Variance	0.083
Gradient Smoothness	0.0
Directional Coherence	0.04
Pattern Complexity	0.125
Pattern Repetition	1.0
Detail Frequency Ratio	0.649
Spatial Variation	0.148
Texture Consistency	0.653

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.522
Brightness Variance	0.235
Brightness Uniformity	0.549
Brightness Skewness	-0.491
Brightness Entropy	6.926
Rms Contrast	0.235
Michelson Contrast	1.0
Weber Contrast	0.759
Mean Local Contrast	0.03
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.659
Shadow Percentage	30.194
Midtone Percentage	37.102
Highlight Percentage	32.705
Shadow Clipping	0.017
Highlight Clipping	0.002
Tonal Balance	0.0
Fine Contrast	0.016
Medium Contrast	0.037
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.216

Metric	Value
Contrast Clustering	0.347

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.739
Color Clustering	0.721
Color Transition Smoothness	0.467
Transition Uniformity	0.502
Sharp Transition Ratio	0.1
Transition Directionality	0.049
Mean Saturation	0.476
Saturation Variance	0.019
Low Saturation Ratio	0.097
Medium Saturation Ratio	0.882
High Saturation Ratio	0.021
Saturation Clustering	0.999
Hue Concentration	0.388
Complementary Balance	0.022
Analogous Dominance	0.695
Temperature Bias	-0.404

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# Major - Research on Harmony* — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0586.html>
- [2] Quercy, A. (2024). *C# Major - Research on Harmony - Gallery*. https://artquamanima.com/en/artworks/2024/01/c-major-research-on-harmony_6k4.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)

3ed5847b13b207470a91dc0fa3b60365506fd-f467154f02b66b50456ae46142c

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240602-0082
Asset code	AQC0586
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