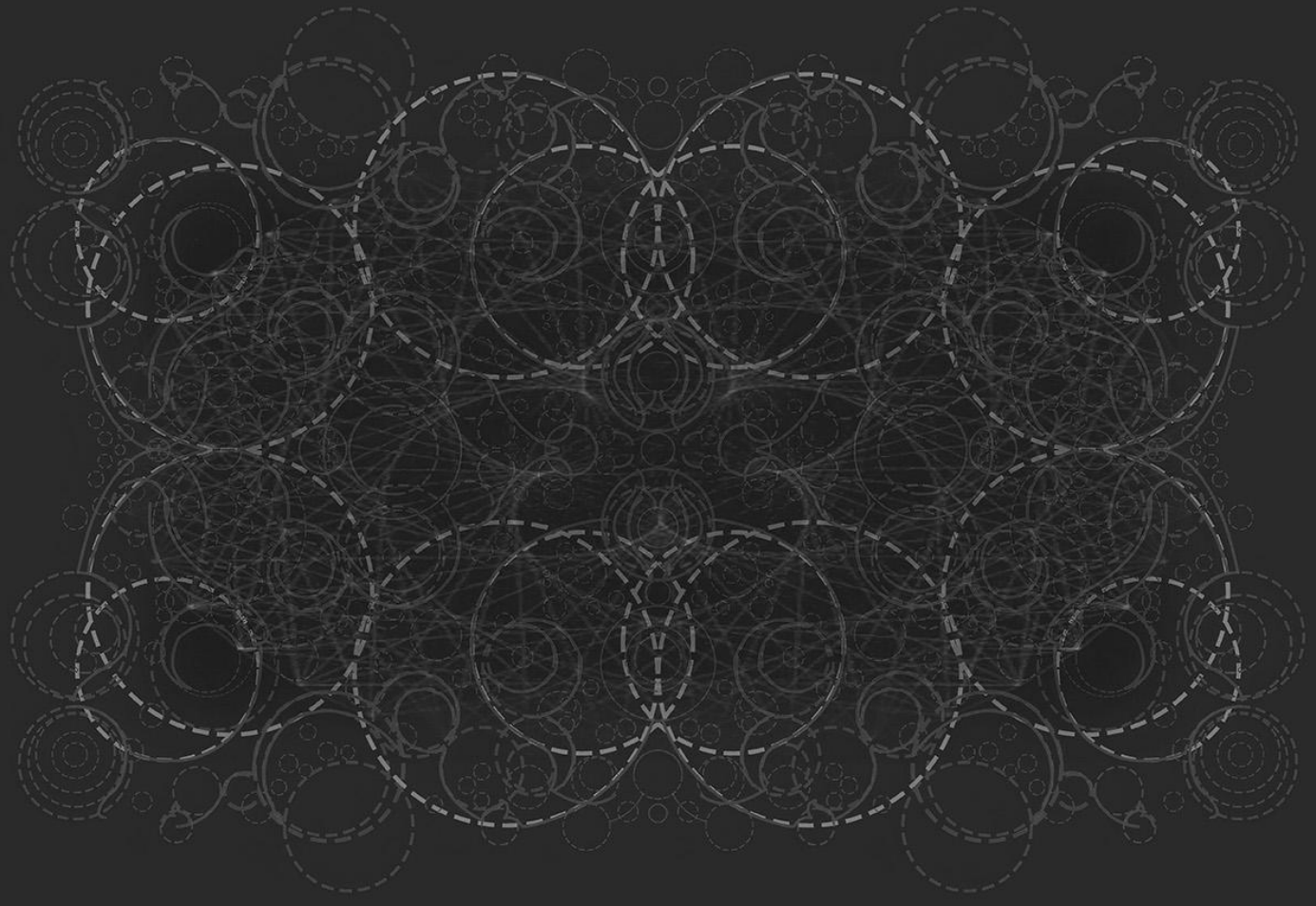
PORTFOLIO

NILOOFAR BANIASADI

Interdisciplinary Artist . Visual Artist . Video & Digital Artist

Selected Works and Research-Creation

Camargo Foundation; Artists
The Latent Weft; Algorithmic Topologies, Mediterranean Transits, and the Post-Digital Carpet



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BIOGRAPHY



Niloofar Baniasadi

Interdisciplinary Artist

Visual Artist | Video & Digital Art | Art Researcher
Carpet Designer

Tehran, Iran | 1993

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EDUCATION

Art University of Isfahan - MA | Carpet Research
SEP 2020 – JUN 2024
GPA: 19.5 out of 20

Shiraz University - BA | Carpet Design
SEP 2012 - FEB 2017
GPA: 17.87 out of 20

PROFESSIONAL PRACTICE

- Independent and commissioned carpet design
since 2016
- Collaboration with Platform 101 and Famori Studio
since 2021

Niloofar Baniasadi is an interdisciplinary artist, carpet designer, and researcher based in Iran. Her practice connects Iranian carpet structures with video art, digital transformation, and glitch processes.

ARTIST STATEMENT

My practice operates at the intersection of traditional textile architectures and time-based digital media. Grounded in a decade of professional carpet design and formal academic research, I approach the Persian carpet not merely as an object of beauty, but as an encoded system; a complex grid where knots function as primal coordinates of order and entropy. I interpret these classical Euclidean structures through the lens of fractal geometry, exploring the tension between traditional symmetry and non-Euclidean flux.

In my work, I treat the carpet as a conceptual precursor to digital logic, where the knot functions as a discrete bit of information. However, my aim is not to equate the two, but to interrogate the act of translation itself. Using digital tools and glitch-based video techniques, I bridge tradition and contemporaneity within a fluid, time-based space. By reinterpreting these formal structures, I create moving-image works where patterns expand, slip out of alignment, and undergo calculated disruptions.

Ultimately, my research-creation practice serves as a platform to translate historical memory into the digital age. By confronting the material labor of the past with the ephemeral textures of contemporary media, I examine how these ancient patterns persist, fracture, and evolve in the post-digital era; seeking to bridge the gap between historical heritage and the algorithmic future.

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01

MY RESEARCH 2024

THE HIDDEN GEOMETRY OF THE CARPET

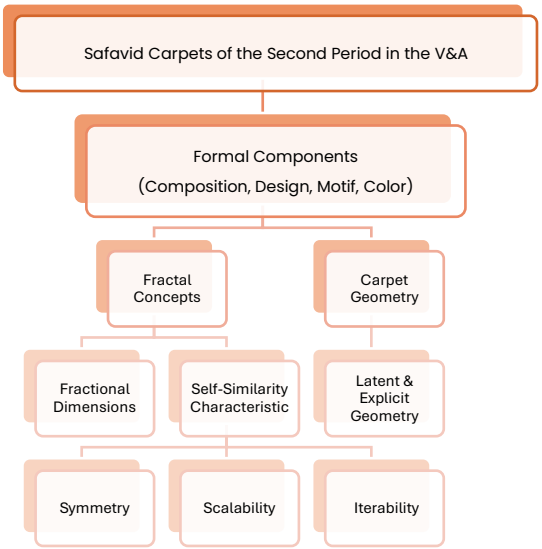
Investigating the Geometric Features of Safavid Carpets through the Fractal Geometry Approach

This research explores the intersection between historical Persian artistry and contemporary mathematics. By analyzing five masterwork carpets from the second Safavid period (Victoria and Albert Museum collection), this project investigates whether the intricate, rhythmic structures of these carpets, often characterized by modular motifs (*vagireh*) and spiral geometries, function according to the principles of fractal geometry.

Utilizing a descriptive-analytical framework, I examined the formal elements of these carpets to identify patterns of self-similarity, iterability, and scalability. By applying quantitative fractal analysis and calculating fractional dimensions, the research demonstrates a surprising alignment between traditional Safavid craftsmanship and fractal theory. It reveals that the "hidden geometry" of these carpets, even without explicit knowledge of fractal science at the time, follows a logic of spatial complexity and self-replicating order that mirrors modern fractal patterns, thereby recontextualizing historical Persian carpet design as a sophisticated expression of generative art.



Afshan-style Vase Carpet (Sample 1) | Paneled Vase-and-Trellis Carpet (Sample 2) | Floral *Eslimi* (Arabesque) *Afshan* Carpet (Sample 3) | Polonaise Carpet (Afshan-Lachak-Toranj Design) (Sample 4) | Polonez Carpet – Afshan-Eslimi Design (Sample 5)



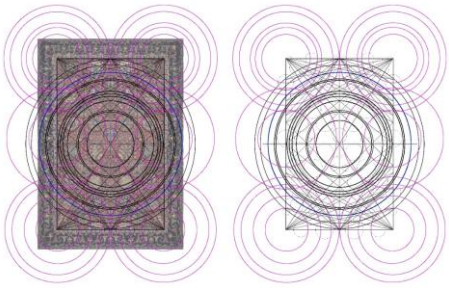
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MY RESEARCH 2024

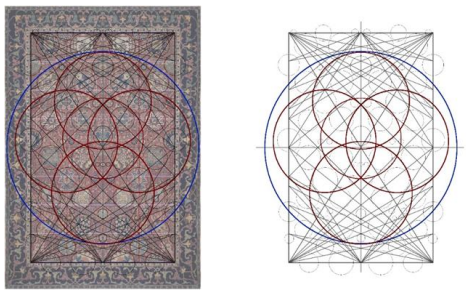
Research Question: How can the geometry of Safavid carpets be analyzed through the lens of fractal geometry?

The fractal analysis of the case studies is conducted by evaluating the overarching composition within the carpet design, alongside an investigation into both the explicit and latent geometric structures. This formal analysis encompasses the proportional relationships between the carpet's constituent elements—specifically regarding the composition of the design, motif, and chromatic distribution—thereby facilitating the identification and extraction of key indices related to both the elements themselves and the generative processes of the carpet design.

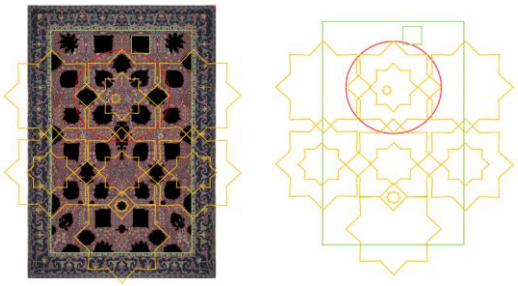
Subsequently, by establishing the primary geometric structures of the composition and the specific motifs of each carpet, one can investigate the relationship between these formal structures, the latent geometry, and the fractal process. This involves applying fundamental fractal principles—namely self-similarity (iterability, scalability, and symmetry). Following the validation of these fundamental principles and the confirmation of self-similar formal components within the carpet as a surface, it becomes necessary to calculate the fractal dimension using the concept of fractional dimensions. This is essential for providing a qualitative understanding of the generative processes involved in various fractal types and their distinct variations. In general, a non-integer dimension value serves as a hallmark of fractal nature. Thus, the fractal dimension acts as a critical analytical tool, providing insights into the spatial density and the occupancy of the carpet's surface by its motifs.



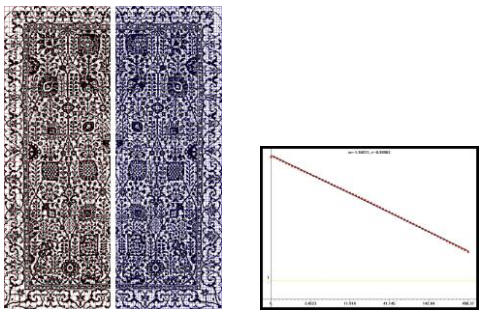
Self-similarity in the hidden geometry of Sample 1, utilizing concentric, repeating circles.



Self-similarity in the hidden geometry of Sample 1, utilizing non-concentric, overlapping, repeating circles.

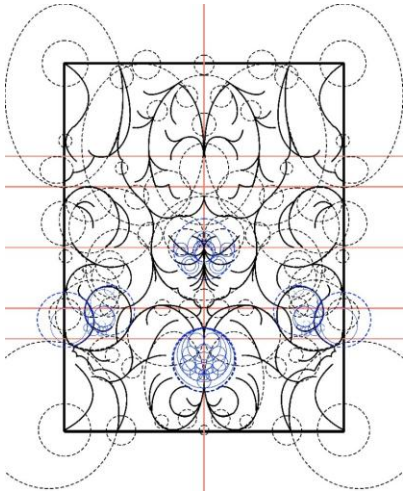


Self-similarity in the hidden geometry of Sample 1, using the coexistence of the main motifs in the important and dynamic points of the text. "Shamseh"

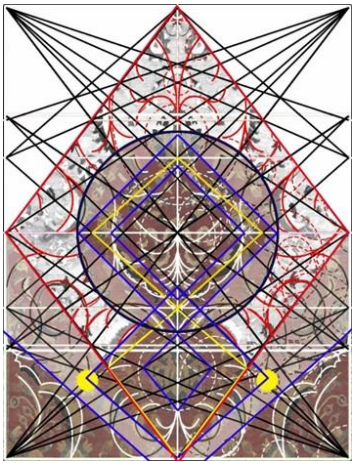


Calculation of the fractal dimension of the "zero-and-one" design (Sample 1) using the box-counting method.
$D = 1.9422$

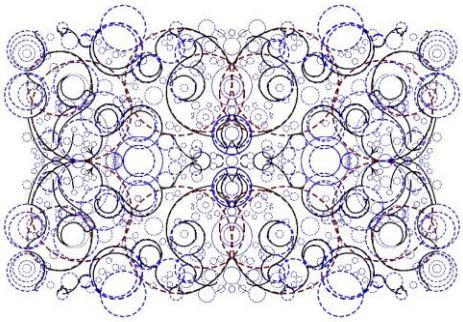
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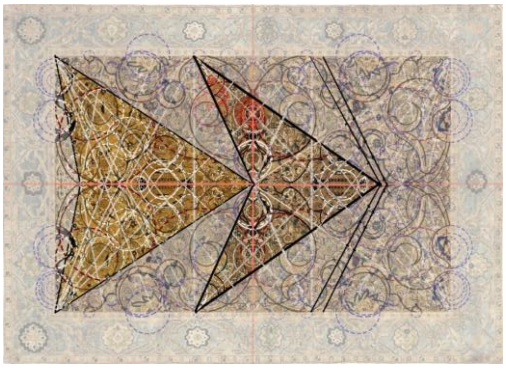
The process of repetition at various scales in the composition of Sample 3, based on a circular structure.



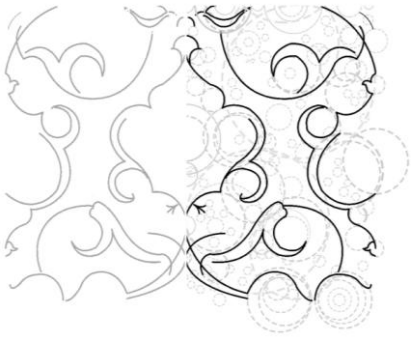
Magnification based on self-similarity within the hidden geometry of Sample 3, utilizing a circular geometric structure and organizing lines.



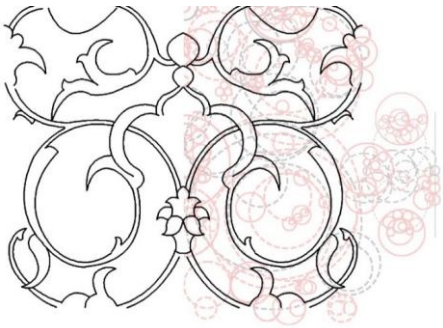
Self-similarity in the hidden geometry of Sample 4, utilizing a circular geometric structure and lines of order.



Self-similar magnification of the "Shaparak" geometric shape within the hidden geometry of Sample 4, utilizing a circular geometric structure and regulating lines.



The process of iteration, scalability, symmetry, and feedback in the composition of Sample 4, based on the circular structure of tendrils (bands) and motifs.



The process of iteration, scalability, symmetry, and feedback in the composition of Sample 5, based on the circular structure of tendrils (bands) and motifs.

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02

MY RESEARCH 2024 | VIDEO ART 2025

THE HIDDEN GEOMETRY OF THE CARPET

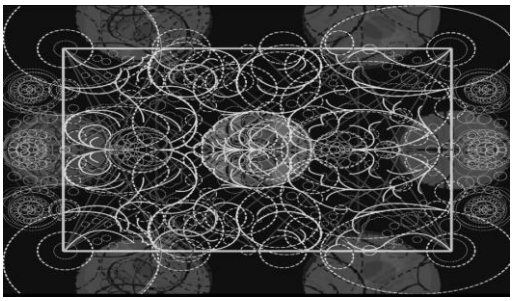
Investigating the Geometric Features of Safavid Carpets through the Fractal Geometry Approach

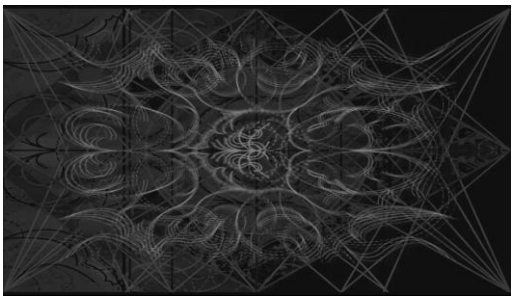
This research became the conceptual bridge between my carpet practice and my later digital and moving-image work.

The Persian carpet, particularly the historical carpet, is more than a decorative object. It is a complex network of hidden geometry, a pattern of order and repetition that gives meaning to the finesse of every warp and weft. Every knot and every colour reflects a world shaped by symmetry and proportion.

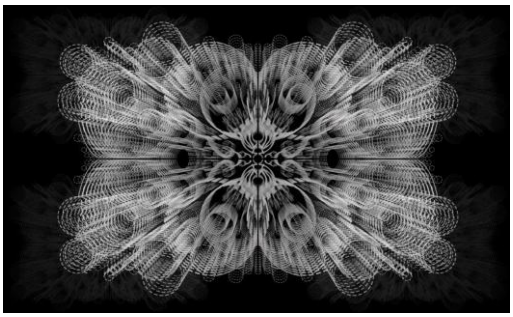
Yet when it meets glitch art, this traditional order is disrupted. As a digital disturbance, glitch challenges the boundaries between perfection and flaw, stability and instability. When the precise structures of the historical carpet intersect with the noise and visual breaks of glitch, a new image emerges: beauty in ruin, order in disorder.

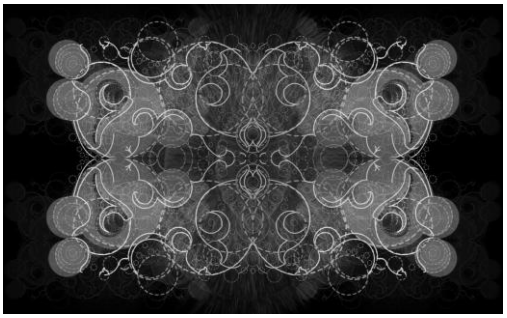
This video is an attempt to redefine traditional art in a modern form, where the carpet's hidden geometry, set within digital errors, tells a new story.





Hidden Geometry of the Safavid Carpet - Part 1 Video Art
Video Artist: Niloofar Baniasadi | Sound Designer: Vamegh





Hidden Geometry of the Safavid Carpet - Part 2 Video Art
Video Artist: Niloofar Baniasadi | Sound Designer: Vamegh

03

DIGITAL / VIDEO ART 2023–2025

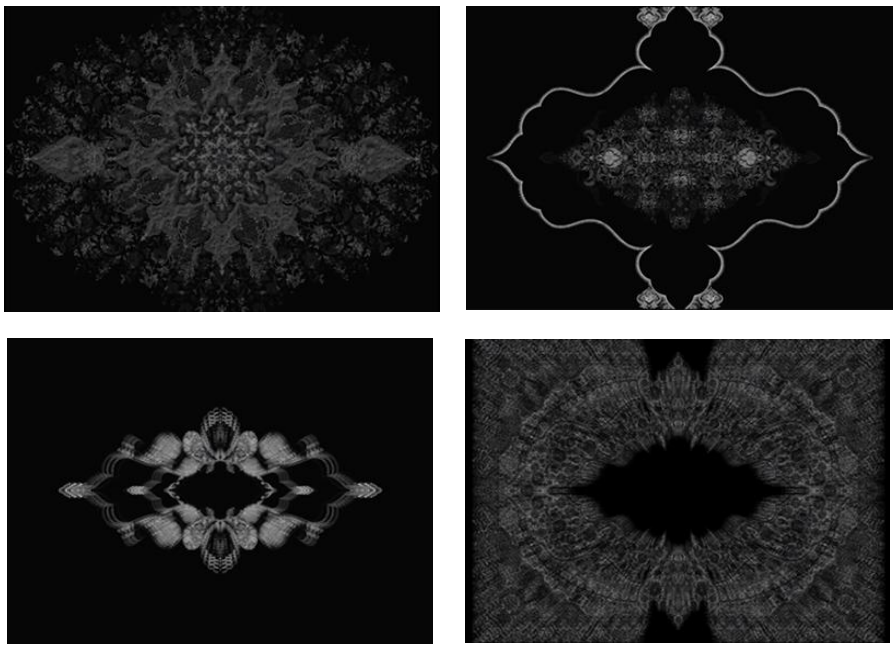
FRACTAL GEOMETRY OF THE CARPET

Flower of Life

Fractal Geometry, an interdisciplinary field rooted in mathematics and computing, mirrors cosmic forms and classical art principles. Its innovative application in arts like Persian carpet weaving bridges traditional craftsmanship with modern technology. By integrating fractal geometry, my work as a digital artist and carpet design researcher explores the interplay between Euclidean geometry in Islamic art and fractal patterns in Iranian carpets, fostering a connection between heritage and contemporary digital art. I aim to preserve the essence of Persian carpets through a video project, designed using pixelation and animated with Photoshop and After Effects. The sound design, by Farbod Hamedi, inspired by incorporates fractal concepts using synthesizers and natural sounds. This project blends traditional carpet artistry with digital techniques, reviving geometric forms and enhancing their relevance in the digital age, thus connecting generations and diverse artistic disciplines.

This video art, titled "Fractal Geometry of The Carpet," with the support of Platform 101, it was showcased at several international events alongside works by other international video artists:

- Glitch Art in 'Souls for Tech'; Sulmona, Italy - Apr 2024
- Hidden Geometry & Glitch Art, Platform 101; Tehran, Iran - Rischee29 - Mar–Apr 2025
- Festival, International Video Art Festival; Coimbra, Portugal - Oct 2024
- Geometry of Creation, Platform 101; Tehran, Iran - E1 Art Gallery - Sep–Oct 2024
- Glitch Art Brazil, Platform 101; Online Exhibition's fourth edition, Brazil - Dec 2023–Apr 2024
- The Wrong Biennale' 6th edition, Glitch Art; Spain - Nov 2022–Mar 2023



Fractal Geometry of the Carpet - Flower of Life Video Art
Video Artist: Niloofar Baniasadi | Sound Designer: Farbod Hamedi

04

DIGITAL / VIDEO ART 2023–2025

SACRED GEOMETRY OF THE CARPET

Glitch, disruption and unstable recognition

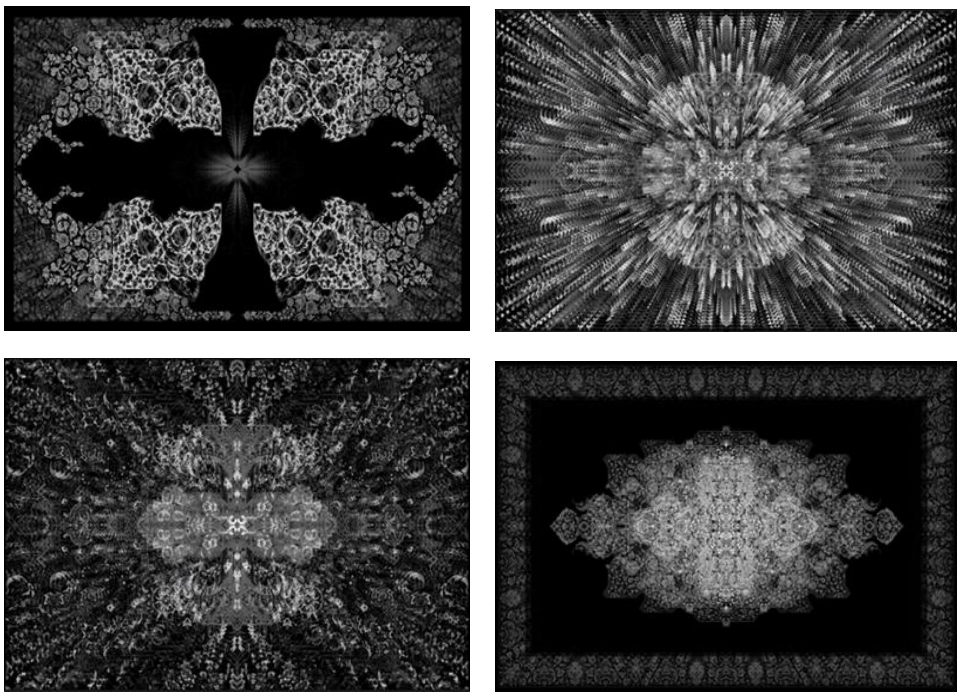
Sacred Geometry serves as a visual and conceptual framework expressing cultural, aesthetic, and metaphysical values through patterns and structures observed in nature and the cosmos. These forms, rooted in geometric archetypes, reveal the interconnectedness of all things, embodying the principle of unity where each part reflects the whole. This concept is central to my work with Persian carpets, which act as cultural mediums infused with countless geometric forms, symbolizing continuity and unity. My artistic practice, inspired by these principles, explores the vibrational resonance of sacred geometry through digital art. Additionally, my sound design, influenced by Babak Sepanta's approach, incorporates sacred geometry using electronic synthesizers and recorded natural sounds, creating an auditory expression of these universal patterns. This interdisciplinary approach underscores the profound relationship between form, sound, and cultural heritage.

This video art, titled "Sacred Geometry," was first selected and screened in October 2023 at the Glitch Cinema program of the Glitch Art Festival (Fubar Space) in Zagreb, Croatia. Subsequently, with the support of Platform 101, it was showcased at several international events alongside works by other international video artists:

- Glitch Art in 'Souls for Tech'; Sulmona, Italy - Apr 2024
- Hidden Geometry & Glitch Art, Platform 101; Tehran, Iran - Rischee29 - Mar-Apr 2025

It was also selected and featured at these events via the FilmFreeway platform:

- Chicago Amarcord Arthouse Television Awards, USA. Semi-Finalist -Oct 2025
- Filmmaker Sessions Vol. 8, Lift-Off Global; UK - Aug 2025



Sacred geometry of the Carpet Video Art
Video Artist: Niloofar Baniasadi | Sound Designer: Babak Sepanta

05

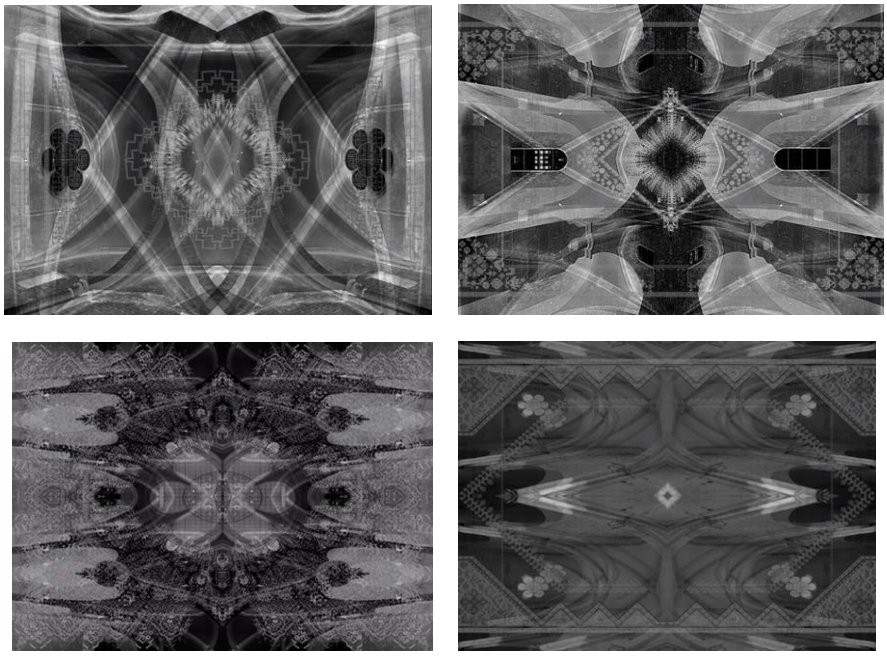
DIGITAL / VIDEO ART 2024

AWAKENED DAWN

Artist Residency, France

In the language of form, the cosmos whispers through proportion, rhythm, repetition, and return. Sacred geometry is not an invention of humanity, but an intuitive revelation; a silent map that equally creates galaxies and ornamental visual elements; a hidden symphony of sound, color, and number. This video weaves together two ancient visual chants: the endless repetition and self-similar patterns of Iranian motifs, and the celestial rows of French Gothic architecture. Beneath their cultural veils, both submit to the same ancient law. In this meditative texture, the left and right hemispheres become one; within the chaos of history lies eternal order, adorning itself in multiplicity. This work is a recognition of origin.

- "Odyssée" residency program in "Abbaye de Noirlac"; Bruère-Allichamps, France, awarded in 2024 for a collaborative project: a music-poetry project by Haddad Heydari and video art by Niloofar Baniasadi; The Association of Cultural Exchange Centres (ACCR), with the support of the Ministry of Culture and Communication, coordinated the "Odyssée" residency program.
- SENSES International Art Fair 2025 – Lecce, Italy - 19th Dec 2025 – 4th Jan 2026; Video Art Category | International exhibition of contemporary art organized by ITSLIQUID Group | My video art, titled Awakened Dawn, featuring music by Haddad Heydari, was selected for this international exhibition.



Nature's Hidden Melody | Awakened Dawn Video Art
Video Artist: Niloofar Baniasadi | Sound Designer: Haddad Heydari

06

CURRENT RESEARCH-CREATION

THE LATENT WEFT

Algorithmic Topologies, Mediterranean Transits, and the Post-Digital Carpet

The Camargo Foundation

The Latent Weft explores what happens when the structural logic of Safavid carpets is translated into moving image. Drawing on my research into repetition, self-similarity, and the relation between part and whole in five carpets held by the Victoria and Albert Museum, I will test how a woven pattern can become a temporal structure without reducing the carpet to ornament or data. At Camargo, I will combine close visual analysis, small-scale video experiments, and dialogue with other fellows. The residency will yield a sequence of moving-image studies and a written framework for a future installation.

Methodology and Working Process at Camargo

The fellowship at Camargo will be organized across three distinct, deeply integrated phases:

Phase 1 (Weeks 1-3)

During the first three weeks, I will refine the selection of motifs and relationships from my existing research, assemble a concise visual notebook, and identify accessible local or online material.

Phase 2 (Weeks 4-7)

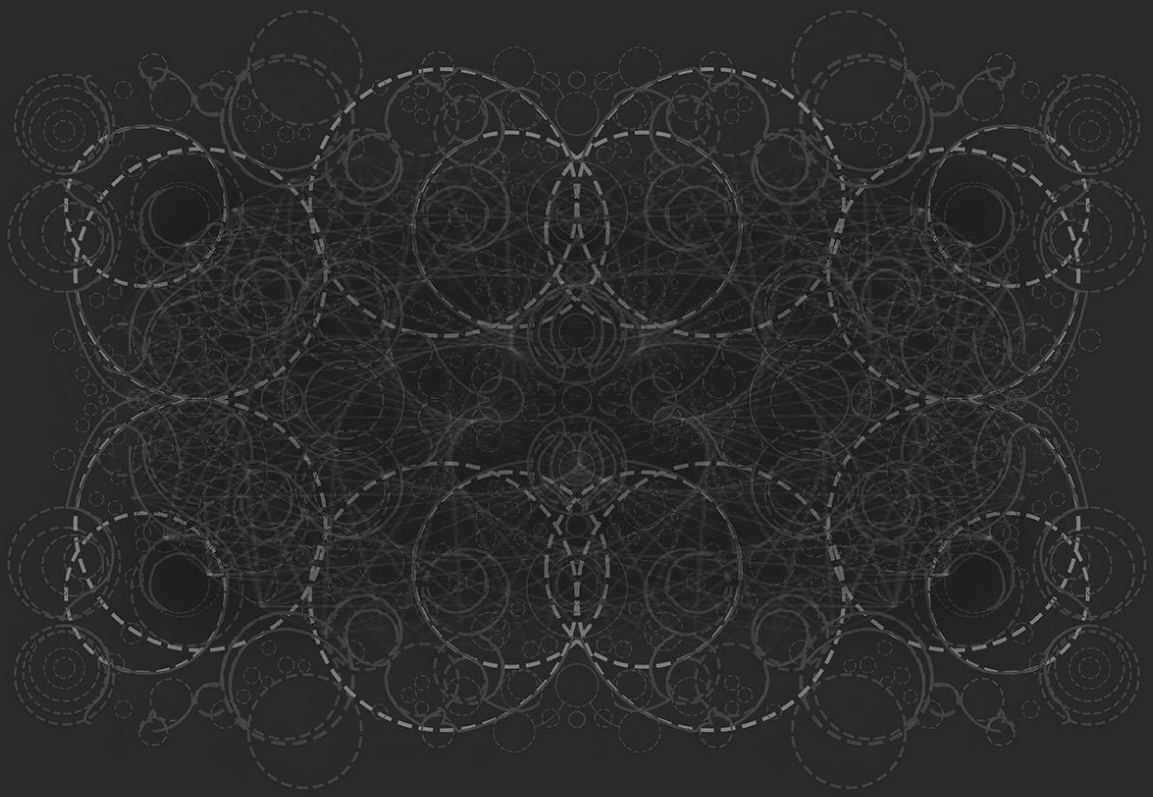
In weeks four to seven, I will produce a series of short studies using the equipment and software I bring, comparing several approaches to pacing, repetition, and interruption.

Phase 3 (Weeks 8-9)

In the final three weeks, I will edit the most useful studies, write a reflective text on the artistic method, and develop a proposal for a later two-channel installation.

These are research outputs and prototypes; a completed installation or peer-reviewed publication is beyond the scope of ten weeks.
I would also lead a resident session in which fellows encounter a carpet composition through looking, tracing, and a short screening. Their different ways of reading the image would help me question my own assumptions about pattern and meaning. If an open studio is available, I could share selected experiments as works in progress.

WITH THANKS FOR YOUR ATTENTION



NILO-BANI-ASADI

ARTIST&ART RESEARCHER

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