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***Abstract*—¡Text of the summary of your article¿**

I. Introduction

This paper is organized as follows: In the next Section, a brief review on Evolutionary Art is presented.

II. Evolutionary Art

Creative evolutionary systems are used to evolve aesthetically pleasing or innovative structures [1].

A. Art Representation for Evolutive Art

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B. Aesthetic measures for evolutive art

One of the main challenges in Evolutionary Art is how to measure aesthetic value of an piece of evolutive art.

Definition Two modes of aesthetics measures can be defined [2]:

1) "*Aesthetics evaluations are expected to simulate, predict or cater to humans notions of beauty and taste.*" This will be the definition used in this paper.
2) "*Is an aspect of meta-aesthetic exploration and usually involves aesthetic standards created by software agents in artificial worlds.*"

According to Galanter [2], computational aesthetics measures can be classified in the following categories:

- Based on Formulaic and Geometric Theories. The aesthetics of a piece of art are evaluated using a formula o principle (e.g., pythagorean proportions).
- Based in Design Principles. Like the rule of thirds or theory of color (e.g., using opposite colors).
- Based in Neural Networks and Connective Models.
- Complexity Based Models.
- Based in Evolutionary Systems:
  - Interactive Evolutionary Computation. The fitness of the individuals is determined by human agents.
  - Performance based goals. Certain properties of the art piece are evaluated and optimized based in performance measures (e.g., usable surface in a furniture design generator).
  - Error relative to Exemplars. The individual fitness is measured using a real-world example (e.g., a photography).
  - Complexity measures. This type of measures is based in the idea the complexity is directly related to aesthetics and follows the path firstly stablished by Birkhoff [3].
  - Multi-objective. Given the multidimensional nature of aesthetics judgement, multi-objective EAs are a clear option in order to deal with this multidimensionality.
  - Extensions to EA (such as, coevolution, agent swarm behavior, etc.).

A brief classification of the aesthetic measures found in a short review can be fount in Table I.

III. Genetic Operators

A. Representation

B. Initialization

C. Mutation

D. Crossover

E. Fitness Functions

1) Histogram: HISTOGRAMA DEF: a graphical representation of the tonal distribution in an image.

2) Image Matching:

IV. Experimental Results

V. Conclusions and Future Work

Aknowledments.:

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TABLE I. CLASSIFICATION OF THE AESTHETIC MEASURES USED IN A BRIEF REVIEW OF THE LITERATURE ON EVOLUTIVE ART.

Type	Aesthetic Measure
Formulaic and Geometric Theories	Fractal dimension [4], Image order [5], Benford Law [6]
Based in Design Principles	Color contrast (hue) [7], Color ingredient [5], Composition, tonality and color [1].
Interactive Evolutionary Computation	The electric sheep project [8]
Error relative to Exemplars	Resemblance score [1], pixel comparation [9]
Performance based goals	Evolving virtual creatures [10]
Complexity measures	Image complexity [5], Machado and Cardoso aesthetic measure [11]

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