TITLE: Evolving C-Plants
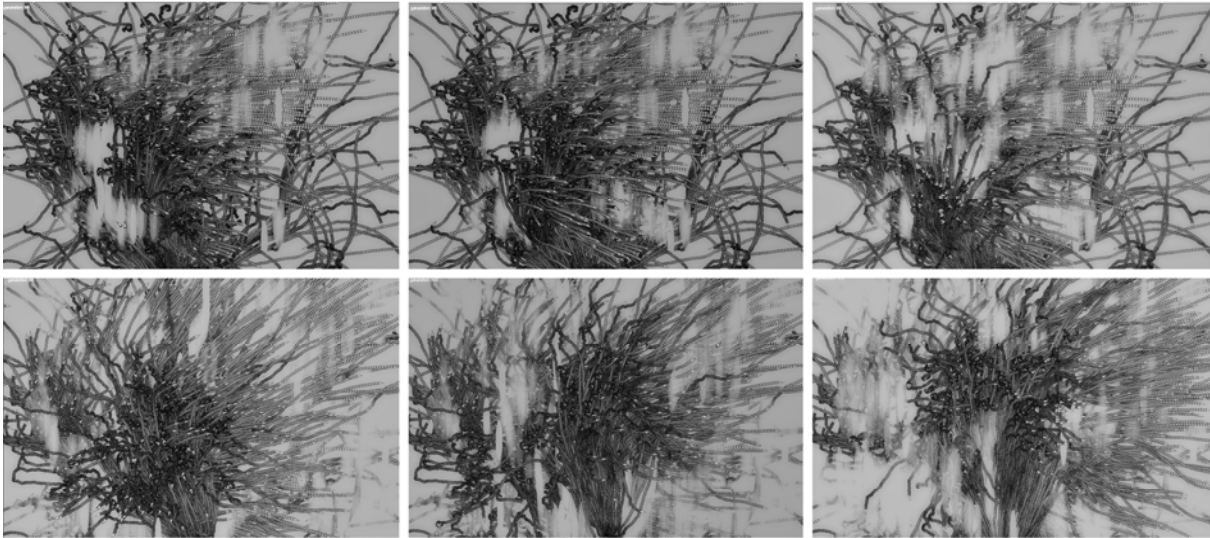*(Interactive Artwork, Art)*

Topics: computational art, evolutionary art

Daniela Sirbu
Associate Professor
Department of New Media
University of Lethbridge
Canada
daniela.sirbu@uleth.ca

Abstract
Evolving C-Plants (Computational Plants) is an experiment in adaptive drawing based on GA (genetic algorithms) computational paradigms. C-Plants come to live as visual structures that aggregate in time from traces generated by a population of artificial agents in movement. Drawing agents evolve motion paths that adapt in response to reconfigurations of structural zones in the artificial medium, which can be manipulated by the artist or can be left in fixed positions. Therefore, in this experiment of adaptive drawing, artificial agents evolve drawings in relation to environmental changes controlled by the artist. Aesthetic concepts are expressed in the adaptive drawing system by designing and activating the environment in which the artificial drawing agents live and evolve.

Evolving C-Plants. Still frames from interactive computational artwork by Daniela Sirbu.

Email:
daniela.sirbu@uleth.ca

Key words: computational art, computational creativity, evolutionary algorithms, genetic algorithms, software art, generative art

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