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FUNCTIONAL CG-ART

"EXHIBIT"

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There are many approaches to making computer art. Some people want to make art works with reality, others want to create abstract forms, while others prefer geometrical patterns with special emphasis on the features of the computer.

We have developed the computer art systems which combine mathematical and natural art forms. That is, I want to generate pictures which have mathematical beauties (easily generated by the computer) and natural beauties (reflecting the loveliness of birds or dogs in the natural world). My system was named Artistic, Realistic, Technician (ART). To express the natural beauties, hand-drawn figures are input to the computer directly. Using this method, the pictures can reveal to us the author's mind. The patterns of trees or prairies are generated by simple mathematical functions.

In the ART-4 system (the latest version of ART system) the canvas is supposed to be covered by a fine mesh. At each mesh point, the value of a pattern function is calculated. According to the function value, a pattern element is drawn at the mesh-point. The pictures are thus generated.

The picture of "Dog in Dream" is a newly made one. This dog was very old and sick. It was deserted by its owner at my institute. I had kept this dog for 7 years before it died. It was about 20 years old and it could not stand up, but if I walked up to it, the dog looked at me with deeply grateful eyes and it was