Abstract

String rewriting systems are another iterative process for creating fractals. The additional grammar formalism in L-systems allows us to build a richer variety of shapes. L-Systems are an efficient way to encode complicated images. With L-Systems different replacements can be made in different parts of the picture. L-Systems can be extended to three dimensions, and have been used to make realistic forgeries of plants. They provide a good laboratory for learning about recursive processes, and pattern recognition. In this last article in the series, we explain L-System formalism initially developed for modeling plant growth. The concept can be also used for creating Space filling curves. The drawing of these plots in spreadsheet is explained. It is the first attempt in drawing all fractals in spreadsheet.
References

- Barnsley, M., F., "Fractals Everywhere", 1993

Index Terms

Computer Science
Algorithms

Keywords

Computational thinking L-Systems Space filling curves