Abstract

The aim of this paper is to find relationship between Poset Geometry and Mathematical Morphology. We characterize morphological convex geometries, using the definition of Moore family. We also show that this can be connected to Alexandroff space. We also presented an algebraic framework for Mathematical Morphology.

Reference

- Alain Bretto, Enzo Maria Li Marzi. Mathematical Morphology and Poset Geometry.
- Chu-Song Chen, Yi-Ping Hung. Theoretical Aspects of Vertically Invariant Gray-Level
Morphological Operators and Their Application on Adaptive Signal and Image Filtering, IEEE transactions on signal processing, vol. 47, no. 4, april 1999 1049
- Henk Heijmans, Rein Van Den Boomgaard , Morphological scale space- operators.
- Jean Cousty, Laurent Najman and Jean Serra, Some morphological operators in graph spaces, ISSM-2009.

Index Terms
Computer Science Mathematical Morphology
Key words

family
Alexandroff space

Dilation
Erosion
Morphological closure
convex geometry
Morphological space