Stellingen

behorende bij het proefschrift

Efficient Morphological tools for Astronomical Image Processing

van

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1. When applicable, statistics and max-trees combined together reduce the cumbersome quest for parameters in connected filters.
2. Mask connectivity and viscous operators allow for selective clustering (or partitioning) of closely-spaced astronomical objects.
3. An efficient handling of spatial and intensity partitions of the image domain lets a novel max-tree parallel algorithm work on high bit-depth images.
4. Object recognition can be improved by exploiting the versatility of the component tree structure, in terms of using both noise models and parameter spaces built on morphological information.
5. Pattern spectra can be difficult to explain briefly, but they are in fact easy to implement, fast to compute on a max-tree and they do their job.
6. The viscous-hyperconnected filtering algorithm holds that sense of fulfilment that arises from turning a piece of theory into a usable algorithm.
7. An interest in humanities is what distinguishes a well-rounded scientist from just a skilled worker in science: it is fundamental not to lose sight of the bigger picture.
8. Holding meetings and brainstorming in front of a solar telescope raises both the levels of attention and of vitamin D.