

Line Clipping Algorithm Complexity in E^2 and E^3

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The presentation will examine the current research experience in the field of fundamental algorithms complexity and line clipping algorithms. Line clipping algorithms can be taken as an example for a demonstration how some fundamental algorithms can be improved significantly and how their complexity can be changed. Many algorithms have been developed so far and some algorithms were developed for some very special cases. In spite of the simplicity of the line clipping problem it seems to be quite difficult to make appropriate tests that prove the efficiency or properties of the given algorithm. Also experiments published elsewhere seem to be difficult to repeat.

The aim of this presentation is to show thoughts and developments made in the past that lead to new line clipping algorithms in E^2 and E^3 that proved some general approaches to algorithms design.

Some papers are available in on-line form and can be found at <http://herakles.zcu.cz>

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