

Signature searching: theory and applications

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The basic idea of a signature is developed and illustrated with an example. The principle of using signatures for searching is explained in its early use in text editors, and the relationship to superimposed coding is explored. A survey is given of applications of signature searching in other fields, such as chemical structure searching and library and office automation. It will be shown that the simplicity of signature searching makes it suitable for implementation in specialized hardware, and that considerable gains in search speed can be realized.