Parallel Computing in Mathematical Character Recognition

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Abstract

Our approach to mathematical character recognition [1, 2, 3, 4] is based on the representation of digital ink traces as plane curves $(x(s), y(s))$ parameterized by arc length. Representing x and y as truncated Legendre-Sobolev series, we find the series coefficients provide a useful and efficient means of on-line character classification. The present talk shows how these series coefficients can be computed in parallel, possibly by special purpose hardware in a digital pen, and how the classification may be done in real time.

References

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