## **Accepted Manuscript**

Using Support Vector Machines for the Computationally Efficient Identification of Acceptable Design Parameters in Computer-Aided Engineering Applications

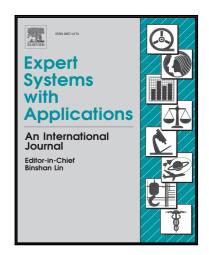
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#### ACCEPTED MANUSCRIPT

### Highlights

- SVMs are used to estimate the boundary of acceptable design parameters
- An active learning method is developed to efficiently refine the boundary estimate
- The algorithm is applied to a (known) toy function to demonstrate its effectiveness
- The approach is subsequently used to find the dynamic stability limit of a train



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