

## Using Support Vector Machines for Measuring Democracy

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**Abstract :** We present a novel approach for measuring democracy, which enables a very detailed and sensitive index. This method is based on Support Vector Machines, a mathematical algorithm for pattern recognition. Our implementation evaluates 188 countries in the period between 1981 and 2011. The Support Vector Machines Democracy Index (SVMDI) is continuously on the 0-1-Interval and robust to variations in the numerical process parameters. The algorithm introduced here can be used for every concept of democracy without additional adjustments, and due to its flexibility it is also a valuable tool for comparison studies.

**Keywords :** democracy, democracy index, machine learning, support vector machines

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