## Using the Appropriate Norm In The K-Nearest Neighbours Analysis. ISSN 1751-3030

Author: Ramesh Chandra Bagadi Data Scientist INSOFE (International School Of Engineering), Hyderabad, India. rameshcbagadi@uwalumni.com +91 9440032711

## **Technical Note**

One can note that in most literature about K-Nearest Neighbours Analysis, the author's usually take the Euclidean Distance (the L2 Norm) for the nearness analysis. However, we should know that not all Sets under investigation are continuous in nature and some take quantized values. Hence, for a given set of points, we should first find the quantized field function which gives the set of concern as its eigen spectra. For such Quantum Field function, we can construct the appropriate Metric that satisfies the given set of points. Now from this Metric, we can construct the appropriate Norm for considering the Nearness Analysis.

Given any set of points, we first find a function whose roots are the given set of points. For this Function, we find the Force Field that creates this aforementioned function. When we solve such Force Field's Field Equations, we get the desired Metric as a solution. We slate the distance metric for the given set of points using this thusly found Metric.

## References

http://www.philica.com/advancedsearch.php?author=12897 http://www.vixra.org/author/ramesh\_chandra\_bagadi