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***** CALL FOR PAPERS *****

SPECIAL SESSION ON

Certain Investigations On Financial Crime Analysis Using Machine Learning Approaches

SESSION ORGANIZERS:

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EDITORIAL BOARD: (Optional)

[Name, University or Organization, Country, e-mail]

SESSION DESCRIPTION:

Financial crimes are the most significant threat happening globally which affects the regular life activities of the public in the considerable manner. The Police investigation departments detect serial crime based on their similarity and the locations. The manual analysis for finding the crime location details with the less man power of police departments would be very difficult and time consuming process. Crime analysis mapping is the process of utilizing the geographical information system processing the crime analysis techniques together in order to focus on the spatial context of the crimes in the specified regions. The class imbalance problem and low clustering accuracy for effective serial crime detection. Serial crime detection can be done by collecting the crime data from police record of Coimbatore city in INDIA, and then analyzing the types of crimes that had occurred serially in a specified manner in a particular location. The detection can be made more effective by oversampling the imbalanced dataset and then clustering the crime data according to specified features. Thus a modified cut clustering (MCC) method is integrated with Majority Weighted Class Oversampling (MWMO) approach integrated with it to form Majority Weighted Class Oversampling and Modified Cut Clustering (MWMO-MCC) method. Social crime data which is in unstructured format must be pre-processed to handle it in an efficient manner. Social crime data aware kernel density estimation based serial crime detection approach (SAKDESD) is introduced to group the similar crimes. Hotspot mitigation is done by improving the interpolation method and including more graph measures for higher accuracy in hot spots mitigation. The interpolation method is improved by incorporation

of the triangulation approach to form Triangulation based interpolation method (TIM).
The Performance of the serial crime was evaluation

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