CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

Notice for the PhD Viva Voce Examination

Mr Boppuru Rudra Prathap (Reg. No 1447101), PhD scholar at CHRIST (Deemed to be University), will defend his PhD thesis at the public viva voce examination on Wednesday, 27 May 2020 at 3.00 pm. The defense will be conducted online through Google Meet.

Title of the Thesis	**:**	**Spatio Temporal Crime Analysis and Forecasting Using Social Media Data**
Discipline	**:**	**Engineering**
External Examiner (Outside Karnataka)	**:**	**Dr Ramakalyan Ayyagari** Professor Department of Instr. & Control Engineering Office: # 322, Lyceum Building, National Institute of Technology Tiruchirappalli, Tamilnadu - 620 015
External Examiner (Within Karnataka)	**:**	**Dr H S Guruprasad** Professor B M S College of Engineering P.O Box No. 1908 Bull Temple Road Bengaluru - 560019
Supervisor	**:**	**Dr K Ramesha** Professor Department of Electronics and Communication Engineering Dr Ambedkar Institute of Technology Mallathahalli Bengaluru – 560056

Since it is an open viva, faculty members and research scholars of all branches of research are cordially invited to attend.

Registrar

Place: Bengaluru
Date: 21 May 2020

ABSTRACT

Social media is the platform where users communicate, interact, share ideas, career interest, pictures, video, etc. The study says that Social media gives the opportunity to analyze human behaviors, spatial and temporal relationships. Based on study Crime analysis using data from social media such as Facebook, Newsfeed articles, Twitter, etc. is becoming one of the emerging areas of research across the world. Using spatial and temporal relationships of social media data, it is possible to extract useful data for analysis of criminal activities. The research focuses on the implementation of textual data analytics by collecting the data from different news feeds and provides visualization. The crime data has been collected using RTI application with the police department and compared with news feed dataset which is on specific timespan. In this work, 68 types of crime keywords are classified and shown in 6 subcategories of classes with geographical factors, and temporal factors from RSS feeds. The research work proposes a framework for crime analysis using Newsfeed data, mainly concentrates on the hotspot detection using K- Means algorithm, Density identification of individual crime using KDE algorithm, Forecasting of crime using ARIMA Time series analysis , in Indian and Bangalore context. The results are validated using official source statistics of crime in the Bangalore context. The model will help in finding, which will everyone to know about the crime and gives time to prevent it. With the help of this system, it is possible for police authorities in Bangalore to deploy their resources effectively. This application will result in a reduction of effort and improvement in crime response rates.