CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

Notice for the PhD Viva Voce Examination

Mr Kukatlapalli Pradeep Kumar (Reg. No. 1347101), PhD scholar at CHRIST (Deemed to be University), will defend his PhD thesis at the public viva voce examination on Wednesday, 10 June 2020 at 3.00 pm. The defense will be conducted online on the Webex platform.

Title of the Thesis	**:**	**Design of New Access Control Structure for Provenance Based on Secret Sharing**
Discipline	**:**	**Engineering**
External Examiner (Outside Karnataka)	**:**	**Dr Sabu M K** Associate Professor Department of Computer Applications Cochin University of Science & Technology CUSAT Post Cochin, Kerala - 682022
External Examiner (Within Karnataka)	**:**	**Dr Suresha** Professor Department of Studies in Computer Science University of Mysore Manasa Gangothri Mysore Karnataka - 570006
Supervisor	**:**	**Dr Cherukuri Ravindranath Chowdary** Associate Professor Department of Electrical and Electronics Engineering CHRIST (Deemed to be University) Bengaluru 560 074

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

Registrar

Place: Bengaluru
Date: 2 June 2020

ABSTRACT

Access control is one of the important elements in providing confidentiality to the secured data. Access specifiers helps us understand degree of rights given to the users in utilizing data records in a right manner. Tampering the records by unauthorized parties is a high concern in secure communication. Tamper detection plays an important role in trouble shooting an issue associated with network/ host intrusion scenario. The advances in information technology have driven the modern world to focus on the Web for digital information. People across the globe rely on the internet for all the data from generic information to distribution of personal data over heterogeneous networks. Technology has grown so wide to an extent, where almost all of the financial transactions are taking place through online portals. On the other hand, there has been high rise in the security threats towards user's confidential data. This information is however shared by the online users while performing financial transaction in e-commerce portals. In order to maintain security mechanism over the untrusted networks various authentication techniques available in this regard. All these security procedures are said to be stubborn and adequate on contextual basis, on the other hand over a period of time the intruders would find out ways to break into systems. Data theft and intrusion into the information systems would increase on a daily basis if defensive measures are not in place.

In this concern a new mechanism for securing the data using majority voting concept is proposed. Majority voting in the form of secret sharing for securing provenance data is applied in this regard. Provenance is a record of events, timestamps, versions, transformations occurred for the data of interest. This study emphases on the safety characteristics of data provenance with a distinctive cryptographic approach. The combination of these principles produces unique results for safeguarding the genesis data.