VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI

A PROJECT REPORT ON

SECURE AND DISTRIBUTED DATA DISCOVERY AND DISSEMINATION IN WSNs

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF DEGREE OF,

BACHELOR OF ENGINEERING

IN

INFORMATION SCIENCE AND ENGINEERING

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CERTIFICATE

This is to certify that the Project entitled "SECURE AND DISTRIBUTED DATA DISCOVERY AND DISSEMINATION IN WSNs" has been successfully completed by

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The bonafide students of Department of Information Science & Engineering, Alva's Institute of Engineering and Technology In partial fulfillment for the award of BACHELOR OF ENGINEERING in DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2015– 2016. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

In wireless sensor networks, a data discovery and dissemination protocol for is responsible for updating configuration parameters of, and distributing management commands to, the sensor nodes. Two drawbacks of all existing data discovery and dissemination protocols suffer. First, they are based on the centralized approach; only the base station can distribute data items. Second, those protocols were not designed with security in mind and hence adversaries can easily launch attacks to harm the network.

First secure and distributed data discovery and dissemination protocol named DiDrip. It allows the network owners to authorize multiple network users with different privileges to simultaneously and directly disseminate data items to the sensor nodes. Moreover, as demonstrated by theoretical analysis, it addresses a number of possible security vulnerabilities that have been identified. DiDrip is implemented in an experimental network of resource-limited sensor nodes to show its high efficiency in practice.

Proposed data discovery and dissemination protocol DiDrip have given a brief platform for prioritizing security in the Wireless Sensor networks. Using this, further enhancement and improvements can be done. In the future work, the proposed protocol can be enhanced by increasing the number of nodes. The Future work may also include limited resource and compare the results