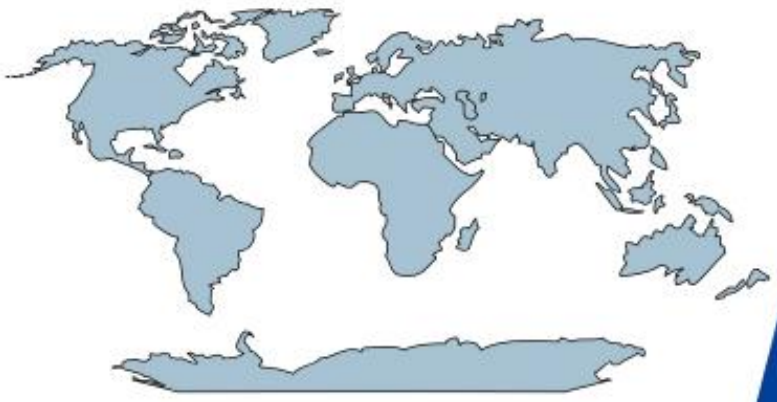
ISSN 2322 - 0899

INTERNATIONAL JOURNAL OF RESEARCH IN MANAGEMENT & SOCIAL SCIENCE



Volume 9, Issue 2 (I)
April - June 2021

DATA SECURITY IN DATA SCIENCE 105 – 107

Prashant Laxman Bhinge and Mithilesh Chauhan

ARTIFICIAL INTELLIGENCE BASED AUTONOMOUS (DRIVERLESS) VEHICLE 108 – 111

Prashant Prakash Shitap and Mithilesh Chauhan

SECURE AND EFFICIENT DATA ROUTING TECHNIQUES FOR IOT 112 – 115

Akash Sarkaniya and Mithilesh Chauhan

NEW NORMS FOR SCHOOL AND COLLEGE EDUCATORS IN INDIAN CITIES, POST COVID ERA 116 – 118

Sakshi Jain

A STUDY ON THE OUTCOME OF THE INCLUSION OF MENTAL HEALTH AS A COMPULSION SUBJECT AFTER COVID-19 IN PRIMARY AND SECONDARY SCHOOLS ALL OVER THE WORLD 119 – 125

Nikita Menghani and Priyanshi Tejnani

A STUDY ON WORK LIFE BALANCE OF EMPLOYEES WORKING IN IT SECTOR DURING WORK FROM HOME IN LOCK DOWN WITH SPECIAL REFERENCES TO MIRA- BHAYANDER REGION 126 – 130

Priyanka Chaudhari and Daksha Choudhary

A STUDY ON THE IMPACT OF COVID-19 ON E-COMMERCE INDUSTRY 131 – 138

Shaina Ansari, Amisha Panchal, Dhanalaxmi Kaunder and Vijay Vishwakarma

A STUDY ON THE IMPACT OF INCREASED SOCIAL MEDIA USAGE ON STUDENTS' MENTAL HEALTH DURING THE COVID-19 LOCKDOWN 139 – 143

Akshat Aggarwal and Prof. Nidhi Chandorkar

A COMPARATIVE ANALYSIS BETWEEN BLOGGERS AND CONVENTIONAL MEDIA 144 – 147

Amol Abhyankar

ANALYSIS OF CONSUMERS PREFERENCE TOWARDS ONLINE HOME SERVICE PROVIDERS 148 – 151

Shraddha Sandip Raikar

A STUDY ON FACTORS AND ROLE OF INTERNET IN VIRAL MARKETING 152 – 155

Anjali Purohit and Daksha Choudhary

STUDY ON IMPACT OF SOCIAL MEDIA INFLUENCERS ON CONSUMER BUYING BEHAVIOUR WITH REFERENCE TO MUMBAI, INDIA 156 – 158

Yukta Bhagwatkar

VIEWS ON AND IMPACT ON INTERNSHIP WITHWORK FROM HOME PRACTICE ON STUDENTS OF 2019-2022 BATCH 159 – 165

Seemin Mohammad Sabir and Rajendra Patil

International Journal of Research in Management & Social Science
Volume 9, Issue 2 (I) April - June 2021
ISSN 2322 - 0899

SECURE AND EFFICIENT DATA ROUTING TECHNIQUES FOR IOT

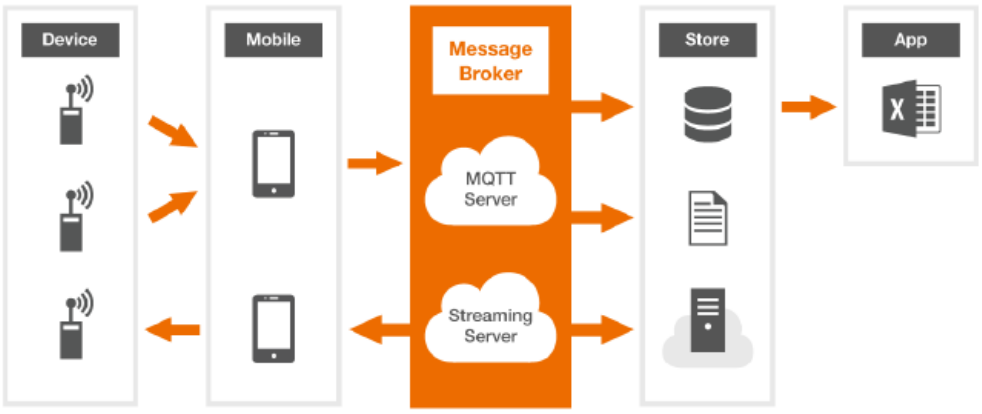
Akash Sarkaniya[1] and Mithilesh Chauhan(Mentor)[2]
Student[1], Department of Information Technology, Vikas College of Arts, Science & Commerce
Assistant Professor[2], Department of Information Technology, Bunts Sangha's S.M. Shetty College of Science, Commerce and Management Studies, Powai

ABSTRACT
Nowadays, the Internet of Things (IoT) has been used widely in our daily day to day life, starting from health care devices, hospital management appliances to a smart city. Most of the IoT devices have limited resources and limited storing capability [1]. Recently, The Internet of Things (IoT) has recently gotten a lot of attention from both business and academia. In the IoT, objects with sensors get recorded and data got sent to server in order to construct some kinds of smart systems, such as smart grid, intelligent transportation systems, healthcare systems and even smart city. In order to ensure the accuracy of sample data, a secure channel must be established between the servers and sensors [2]. If the sample data is tampered, the results of data analysis are beyond belief, and may even bring serious mess. If the security is not ensured, then it may result in a variety of unsought issues. This survey resembles the overall safety aspects of the Internet of Things and debates the overall problems in IoT security [1].

Keywords Security, Integrity, Authentication, IoT

1. INTRODUCTION

The IoT will hold every object, which occurs every day in our lives. In this article we, deliberate how the future technology on the internet will be designed, its aspects and its challenges [3-4] Fig. 1. which describes the evolution of the IoT devices. The IoT is completely transforming very fast as every device integrated to be connected with the internet [5]. This innovation will completely change the life of humans.



The target is to check out the issues in the security of IoT and other challenges of IoT and to propose a complete overview of advanced security techniques. We encapsulate the security issues, various challenges in the data communication of IoT, that will entirely differ from the existing and traditional data collection techniques.

1.1 Problem Statement

Sensor nodes in an IoT produce data at a high and rapid rate, as noted in the introduction; energy is expended in both transmission and reception of the message. The amount of energy required for effective message transmission is determined by the factors listed below:

- length of the message to be delivered
- distance between sensor nodes and sink nodes
- operational energy cost incurred by transmitter and receiver hardware etc.

The goal of this thesis is to investigate the energy efficiency of proactive and reactive routing protocols, particularly DSR, OLSR, and AODV. These protocols have different characteristics for wireless routing. The main problem is to select the correct and energy-efficient routing protocol. Therefore, this thesis addresses the following challenges: