

# **AI in Anomaly Detection and Image Compression**

*A Project Report Submitted  
in Partial Fulfillment of the Requirements  
for the Degree of*

**Bachelor of Technology**

*by*

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*under the guidance of*

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# CERTIFICATE

*This is to certify that the work contained in this thesis entitled “**AI in Anomaly Detection and Image Compression**” is a bonafide work of **Kaushal Kishore (Roll No. 111601008)**, carried out in the Department of Computer Science and Engineering, Indian Institute of Technology Palakkad under my supervision and that it has not been submitted elsewhere for a degree.*

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# Chapter 1

## Introduction

Write introduction.

### 1.1 Section name

1st Section

### 1.2 2nd Section name

2nd Section

### 1.3 Organization of The Report

You can write the about organization of your report in the following manner.

This chapter provides a background for the topics covered in this report. We provided a description of wireless ad hoc networks, and their applications. Then we described the network model that represents the topology of wireless ad hoc networks [1]. In this chapter it is shown that the virtual backbone for wireless ad hoc networks can be represented by a connected dominating set. We explained clustering concepts and lastly the difference



between centralized and distributed algorithms are also discussed. The rest of the chapters are organised as follows: next chapter we provide review of prior works. In Chapter 3 and 4, we discuss our new algorithms for constructing small backbones for ad-hoc wireless network. And finally in chapter 6, we conclude with some future works.

# Chapter 2

## Review of Prior Works

Survey comes hear

### 2.1 Section name

write ....

### 2.2 Conclusion

This chapter provided details of the some of the existing distributed algorithms for constructing a CDS in wireless ad-hoc networks. The results of these evaluations are summarized in table ?? . In next chapter, we discuss our distributed Algorithm I, for constructing a small backbone in ad-hoc wireless network.



# Chapter 3

## Algorithm I

give details of your algorithm

### 3.1 Conclusion

In this chapter, we proposed a distributed algorithm for construction of xyz. The complexity of this algorithm is  $O(n \log n)$ . Next chapter presents another distributed algorithm which has linear time complexity based on xyz.



# Chapter 4

## Algorithm II

The algorithm presented in previous chapter has  $O(n)$  time complexity. We further propose another distributed algorithm in this chapter based on xyz which has linear time complexity.

### 4.1 Construction

Write ...

### 4.2 Improved Method

Write...

### 4.3 Conclusion

In this chapter, we proposed another distributed algorithm for XYZ. This algorithm has both time complexity of  $O(n)$  where  $n$  is the total number of nodes. In next chapter, we conclude and discuss some of the future aspects.



# Chapter 5

## Conclusion and Future Work

write results of your thesis and future work.





# References

- [1] H. A. Omar, K. Abboud, N. Cheng, K. R. Malekshan, A. T. Gamage, and W. Zhuang, “A survey on high efficiency wireless local area networks: Next generation wifi,” *IEEE Communications Surveys Tutorials*, vol. 18, no. 4, pp. 2315–2344, Fourthquarter 2016.