# VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELGAVI-590018 KARNATAKA



Mini Project Report (18ECMP68)

ON

"HOME AUTOMATION UNDER WI-FI THROUGH ANDROID APPS(EX:-SMART FAN)"

Submitted in partial fulfillment of the requirement for the award of degree BACHELOR OF ENGINEERING

IN

ELECTRONICS & COMMUNICATION ENGINEERING

<u>Submitted by:</u>

YASHWANTH C (1SV19EC030)

## Under the Guidance of:

Prof. PRADEEP KUIMAR .S.S Assistant Professor, Dept. of ECE, SIET Turnkur



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Recognized by govt. of Karnataka, Affiliated to VTU, Belagavi and approved by AICTE, New Delhi)

Sira Road, Tumkur-572106

2021-2022

HOD
Dept of E&C
SIET, Tumkur-6

PRINCIPAL SIET., TUMAKURU.



# SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Recognized by govt, of Karnataka, Affiliated to VTU, Belagavi and approved by AICTE, New Delhi) Sira Road, Tumkur-572106, Karnataka 2021-2022



## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

## Certificate

This is to Certified that the mini project work (18ECMP68) entitled "HOME AUTOMATION

UNDER WI-FI THROUGH ANDROID APPS(EX:-SMART FAN)" has been Successfully carried out by YASHWANTH .C (USN: 1SV15EC030), a bonafide students of Shridevi Institute of Engineering and Technology, Tumkur- 572106, in partial fulfillment for the award of Bachelor Of Engineering in Electronics & Communication Engineering of the Vishvesvaraya Technological University, Jnana Sangama, Belagavi -590018, during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessments have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirement with respect to the mini project work prescribed for the said Bachelor Of Engineering degree.

Signature of the guide

Signature of the HOD

Signature of the principal

Prof. Pradeep kumar S.S Assistant professor Dept. of ECE., SIET Tumakuru

HOD Dept. of ECE., SIET Tumakuru

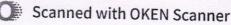
Prof. Aijaz Ahamed Sharief Dr. Narendra Viswanath Principal SIET, Tumakuru

### EXTERNAL VIVA

Name of examiners:

Signature with date:

PRINCIPAL SIET., TUMAKURU.



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## **ABSRACT**

Images are often corrupted by impulse noise in the procedures of image acquisition and transmission. In our project an efficient VLSI implementation of Adaptive Rank Order-Filter (AROF) for removal of impulse noise is proposed. The algorithm removes noise without degrading the image information. The AROF VLSI architecture implements pipelining with parallel processing in order to speed up the filtering process. The performance of proposed algorithm is compared with Decision Tree Based Denoising Method (DTBDM).

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