



Code No. 00074 S.No. 479314

**பாரதிதாசன் பல்கலைக்கழகம்**  
**BHARATHIDASAN UNIVERSITY**

(Established by the Government of Tamil Nadu in 1982; Recognized by UGC under 2f and 12B of UGC Act;  
Member, Association of Indian Universities and Association of Commonwealth Universities; Accredited by NAAC with 'A' Grade)

**பொறியியல் - தொழில்நுட்பவியல் புலம்**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**

**பாரதிதாசன் பல்கலைக்கழக ஆட்சிக் குழு ஆகஸ்டு 2009**

ஆம் ஆண்டு ந. கண்ணன் என்பவர்  
கணிப்பொறியியலும் பொறியியலும் பிரிவில் முனைவர் என்னும்  
பட்டத்திற்குத் தகுதி பெற்றவர் என்று தக்க தேர்வாளர்கள் சான்றளித்தபடி  
முனைவர் என்னும் பட்டத்தை அவருக்குப் பல்கலைக்கழக  
இலச்சினையுடன் வழங்குகிறது.

The Syndicate of the **BHARATHIDASAN UNIVERSITY** hereby makes  
known that **N. KANNAN** has been admitted  
to the Degree of **DOCTOR OF PHILOSOPHY**, in the subject  
**COMPUTER SCIENCE AND ENGINEERING**, having been  
certified by duly appointed Examiners to be qualified to receive  
the same in **AUGUST 2009**.

Thesis Title

"DESIGN OF VECTOR QUANTIZATION TECHNIQUES FOR TRANSFORM  
CODING OF IMAGES WITH ORTHOGONAL POLYNOMIALS"



Given under the seal of the University.

திருச்சிராப்பள்ளி  
Tiruchirappalli

நாள் :  
Dated : 27th November 2009

E 33225

ISSUED ON :

- 3 DEC 2009

பதிவாளர் Registrar

துணைவேந்தர் Vice-Chancellor



ANDHRA UNIVERSITY  
ఆంధ్ర విశ్వకళాపరిషత్



FACULTY OF ENGINEERING

*This is to certify that*

**China Appala Naidu R**

*has been duly admitted to the*

**Degree of Doctor of Philosophy**

*in* **Computer Science and Systems Engineering**

*in this University, he/she having been declared to be*

*qualified to receive the same in* **2015**.

*Given under the Seal of the University*

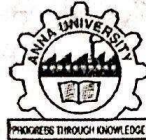
Visakhapatnam, A.P., India.

Date : 29<sup>th</sup> July, 2017

  
Vice-Chancellor



# Anna University



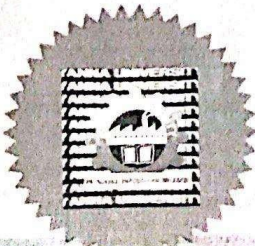
Reg.No. 10950621089/RG

*The Syndicate of the Anna University hereby makes known that SARAVANA KUMAR E has been admitted to the DEGREE OF DOCTOR OF PHILOSOPHY under the Faculty of Information and Communication Engineering, having been certified by the duly appointed examiners to be qualified to receive the same in the year 2015. The degree has been awarded in compliance with the "University Grants Commission, Regulations 2009".*

*Title of the Thesis:*

**A TRUST BASED HYBRID ANT COLONY OPTIMIZED GRID SCHEDULING**

*Given under the Seal of the University*







# ANNA UNIVERSITY CHENNAI - 600 025

## PROVISIONAL CERTIFICATE

Folio No.: TAR014171

This is to certify that the candidate has qualified for the award of *Degree of Doctor of Philosophy* in compliance of the UGC Regulations 2009 as detailed below:

Name : RAGHU R

Registration Number : 1615499104

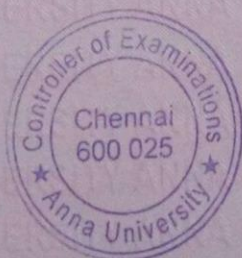
Degree : Ph.D.

Department/Centre/Subject : ELECTRONICS AND COMMUNICATION  
ENGINEERING

Faculty : INFORMATION AND COMMUNICATION  
ENGINEERING

Date, Month & Year of Viva-Voce Examination held : 18.11.2022

Title of the Thesis : AN ENHANCED ANT COLONY OPTIMIZATION  
WITH EFFICIENT ROUTING FOR OPTIMAL  
ROUTE SELECTION IN VEHICULAR AD-HOC  
NETWORKS



*P. Senthivel*

Controller of Examinations

Chennai - 600 025

Date: 02-DEC-2022