



# Vel Tech

Rangarajan Dr. Sagunthala  
R&D Institute of Science and Technology  
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



Sl. No. : 8224

Reg. No. : 13REEC1004

The Board of Management of  
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of  
Science and Technology (Deemed to be University)

hereby makes known that

**BATTULA RAJANNA**  
**S/O BATTULA POSAKKA**

has been admitted to the Degree of  
Doctor of Philosophy

in

**ELECTRONICS & COMMUNICATION ENGINEERING**

having been certified by duly appointed examiners to be  
qualified to receive the same in the year **OCT- 2020**

in accordance with the provisions of

UGC Regulations 2009 (for the award of Ph.D. Degree)

Title of the Thesis:

**COOPERATIVE RELAY SELECTION AND POWER ALLOCATION OPTIMIZATION IN  
EMERGENCY COMMUNICATION SYSTEM**

Given under the seal of this Deemed to be University

Dated : 23.10.2020

Registrar



*S. Salini*  
Vice Chancellor



*B. S. Srinivas*  
Chancellor



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**PROCEEDINGS OF THE Ph.D. ORAL EXAMINATION OF Mr. BATTULA RAJANNA (REG. NO. 13REEC1004) HELD AT 11 A.M. ON 19-10-2020 THROUGH ONLINE MODE AT VEL TECH RANGARAJAN Dr. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY, AVADI, CHENNAI-600 062.**

The Ph.D. Oral Examination of Mr. Battula Rajanna (Reg. No. 13REEC1004) on the thesis "Cooperative Relay Selection and Power Allocation Optimization in Emergency Communication" has been conducted on 19-10-2020 at 11.00 A.M., through online mode using Zoom link.

**Members Present**

1. Dr. S. Rajendiran
2. Dr. D. Vaithyanathan
3. Dr. P. Chandrasekar

**Indian Examiner**

**Subject Expert**

**Supervisor & Convener**

The research scholar Mr. Battula Rajanna (Reg. No. 13REEC1004) has presented the salient features of his research work. The members of the Board and audiences have posed the questions related to the subject. The questions raised by the Foreign and Indian Examiners have also been put to the scholar. The scholar has answered all the questions from the Board Members and the audiences. The scholar's performance in the Ph.D. Oral Examination is **Good**.

Based on the scholar's research work, oral presentation, clarifications and answers to the questions from the Examiners and audiences, the Board unanimously recommends to accept the Ph.D. Thesis for the award of Degree of Doctor of Philosophy in the School of Electrical and Communication, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology to Mr. Battula Rajanna (Reg. No. 13REEC1004).

|   |  |                                                           |
|---|--|-----------------------------------------------------------|
| 1 |  | <b>Indian Examiner</b><br>(Dr. S. Rajendiran)             |
| 2 |  | <b>Subject Expert</b><br>(Dr. D. Vaithyanathan)           |
| 3 |  | <b>Supervisor &amp; Convener</b><br>(Dr. P. Chandrasekar) |

Dr. P. Chandrasekar  
Head of the Department  
Electrical and Electronics Engineering

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**REPORT OF THE BOARD OF EXAMINERS FOR THE PH.D PUBLIC ORAL EXAMINATION OF Mr. BATTULA RAJANNA (REG. NO. 13REEC1004), PART-TIME RESEARCH SCHOLAR, DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, VEL TECH RANGARAJAN DR. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY, AVADI, CHENNAI- 600062.**

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The Public Viva-Voce examination of Mr. Battula Rajanna (Reg. No. 13REEC1004), on his Ph.D thesis entitled "Cooperative Relay Selection and Power Allocation Optimization in Emergency Communication" submitted for the award of Ph.D degree in the Department of Electronics and Communication Engineering of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology has been conducted as per the following schedule:

**Date** : 19-10-2020, Monday at 11.00 a.m.  
**Mode** : Online Video Conference – Zoom app  
**Meeting Link** : Zoom Meeting link  
<https://us04web.zoom.us/j/2700979129?pwd=dUpabE5JYnFVeW5SdW1obEF3QitLZz09>

**Indian Examiner** : Dr. S. Rajendiran, Assistant Professor, Department of E&I,  
Pondicherry Engineering College, Puducherry

**Subject Expert** : Dr. D. Vaithiyanathan, Assistant Professor, Department of ECE,  
National Institute of Technology - Delhi

**Supervisor and Convener** : Dr. P. Chandrasekar  
Professor and Head,  
Department of Electrical and Electronics Engineering, Vel Tech

Based on the candidate's exposition of his thesis and his answers to the questions raised by the examiners and other participants, the Board of Examiners have resolved to recommend that the performance of the candidate in his Ph.D. Oral Examination is **Good** and declare to have passed his Ph.D. Oral Examination and further recommend the award of Ph.D degree in of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology to the candidate.

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|--------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------|
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| <b>Subject Expert</b><br>(Dr. D. Vaithiyanathan) | <b>Indian Examiner</b><br>(Dr. S. Rajendiran) | <b>Supervisor &amp; Convener</b><br>(Dr. P. Chandrasekar) |