



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:24-12-2020

Department	COMPUTER SCIENCE AND ENGINEERING	Application No.	202020193
Area of Research	DEEP LEARNING	Research Mode	PART TIME

Name :VEENA S NAIR
Date of Birth / Age :12-03-1994 / 26 Years
Gender :FEMALE
Category :OC
e-Mail ID :veena.maya.nair@gmail.com
Mobile :9188302481



Veena

Father's/Husband's Name	M G SURENDRAN NAIR	Father's/Husband's Occupation	FARMER
Family Income	2 LAKHS	Residential Type	URBAN
Birth Place	CHENGANNUR	Mother Tongue	MALAYALAM
Religion	HINDU	Martial Status	SINGLE
Aadhaar No.	389490388580	PAN No.	APYPN3643P
Physically Challenged	NO	Type of Disability	-
Address for Communication: 482 MULAPPONETHU HOUSE,CHIRAYIRAMBU PO MARAMON PATHANAMTHITTA DISTRICT KERALA INDIA Pin-689549		Permenant Address: 482 MULAPPONETHU HOUSE,CHIRAYIRAMBU PO MARAMON PATHANAMTHITTA DISTRICT KERALA INDIA Pin-689549	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
MTECH	COMPUTER SCIENCE AND ENGINEERING	KTU	2019	9.16	FIRST CLASS WITH DISTINCTION	REGULAR
BTECH	COMPUTER SCIENCE AND ENGINEERING	MG	2016	6.98	FIRST CLASS	REGULAR

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
SREE BUDDHA COLLEGE OF ENGINEERING	ASSISTANT PROFESSOR	2020-01-09	1970-01-01	TEACHING	

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
202020193_201224152719	VUR29590683071	24-12-2020	600	SUCCESS

Research Proposal

Name of the Candidate : Veena S Nair

Area of Research : Computer Science and Engineering

Proposed title of the work:

Deep learning for identifying classical music ragas and their emotions

Research problem:

Implementing deep neural networks for identify and classify different ragas in both Carnatic and Hindustani music. Emotion recognition is an advanced trend in research field. Based on these neural networks, we can easily recognise an emotion from each ragas.

Research methodology:

Instead to using machine learning algorithms, neural networks that can be used to solve complex problems. The proposed work is about identification and classification of ragas in Indian Classical music. Ragas has several components, they can be classified in various ways by structure, by parent scale, by mood, by family, by time or season and so on. Every composition is structured using ragas. The major challenge is that data is not readily available for the entire project. Therefore to obtain the different data (audio file) is the major task and analyse the structure of ragas, which will be implemented by using deep neural networks. Each ragas has different emotions, tased on our proposed network emotion recognition can be easily identified.

Research time plan:

Stages of Research	0-6 months	6-12 months	12-18 months	18-24 months	24-30 months	30-36 months
Selection of topic						
Literature Review						

Research methodology plan						
Selection of appropriate research techniques						
Analysis						
Findings and recommendations						
Data Compilation, Publications and Final Report						

Possible outcome:

Classifying different ragas of classical music and also identifying the emotions of each ragas using deep learning.

Reference:

[1] Kirane N, Mangaonkar G, Joshi N. *Identifying Emotions Through Raga: An Exploratory Study*, Conference: National Symposium on Acoustics, November 2014.

[2] Priyanka S. Lokhande; Bhavana S. Tiple, *A framework for emotion identification in music: Deep learning approach*, 2017 International Conference on Intelligent Computing and Control Systems.

[3] Sreeparna Banerjee. *A Survey of Prospects and Problems in Hindustani Classical Raga Identification Using Machine Learning Techniques*, Advances in Intelligent Systems and Computing, November 2017.

[4] Huizi Li. *Piano Automatic Computer Composition by Deep Learning and Blockchain Technology*, IEEE Access, Volume 8, 14 October 2020.



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
(A State Government University)



*Upon the recommendation of
the Board of Governors hereby confers*

the Degree of

Master of Technology

in

Computer Science and Engineering

on

VEENA S NAIR

*having fulfilled the requirements as prescribed under the regulations
at the examination held in*

June 2019

Given under the seal of the University, this day, the 17th of August 2019

Register Number: SBW17CSCE11

Cumulative Grade Point Average(CGPA): 9.16

Name of Institution: SREE BUDDHA COLLEGE OF ENGINEERING, AYATHIL,
ELAVUMTHITTA




Vice-Chancellor

Register No : 12015930

Month & Year : May 2016

Mahatma Gandhi University

(Established by Kerala State Legislature by Notification No. 3431/Leg.C1/85/Law, dated 17th April 1985)



FACULTY OF ENGINEERING AND TECHNOLOGY

The Syndicate of the Mahatma Gandhi University

hereby makes known that

VEENA S NAIR

has been admitted to the

Degree of Bachelor of Technology

under **COMPUTER SCIENCE AND ENGINEERING** *Branch she having been certified by duly appointed examiners to be qualified to receive the same and having been by them placed in the* **First Class** *at the examination held in*
May 2016

Given under the seal of the University

University Buildings
Priyadarshini Hills P.O.
Kottayam - 686 560
Kerala, India
Dated : 02-February-2017




Vice-Chancellor

1009174



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
(A State Government University)

MASTER OF TECHNOLOGY (M.TECH) DEGREE EXAMINATIONS
CONSOLIDATED STATEMENT OF GRADES

Sequence No. 19/2/02258

Date of Issue : 29/10/2020

Name : VEENA S NAIR	Register Number : SBW17CSCE11
Date of Birth : 12/03/1994	Institution : SREE BUDDHA COLLEGE OF ENGINEERING, AYATHIL, ELAVUMTHITTA
Specialisation : COMPUTER SCIENCE AND ENGINEERING	
Year of Admission : 2017	Duration of the programme : 2 Years (4 Semesters)
Date of Passing : 15-JUL-2019	Medium of Instruction : English
Total Credits : 68.0	CGPA : 9.16 (Nine Point One Six)

The following Grades were awarded to the Candidate

Sl. No.	Course Code	Course Name	Credits	Grade	Month & Year of Examination	Sl. No.	Course Code	Course Name	Credits	Grade	Month & Year of Examination
First Semester SGPA :- 8.85						11	03CS6192	ADVANCED DATABASE MANAGEMENT SYSTEMS	3.0	A+	APR-2018
1	03CS6141	THEORETICAL FOUNDATIONS OF COMPUTER SCIENCE	4.0	A	DEC-2017	12	03CS6222	ADHOC AND SENSOR NETWORKS	3.0	B+	APR-2018
2	03CS6151	ADVANCED DATA STRUCTURES AND ALGORITHMS	4.0	A	DEC-2017	13	03CS6252	SOCIAL NETWORK ANALYTICS	3.0	A	APR-2018
3	03CS6161	OBJECT ORIENTED SOFTWARE ENGINEERING	4.0	A	DEC-2017	14	03CS6822	OPERATING SYSTEMS AND NETWORKING LAB	1.0	O	APR-2018
4	03CS6171	COMPUTER SECURITY AND APPLIED CRYPTOGRAPHY	3.0	O	DEC-2017	15	03CS6902	MINI PROJECT	2.0	A	APR-2018
5	03CS6181	DIGITAL IMAGE PROCESSING	3.0	A+	DEC-2017	Third Semester SGPA :- 9.63					
6	03RM6001	RESEARCH METHODOLOGY	2.0	A+	DEC-2017	16	03CS7013	ADVANCED DATA MINING CONCEPTS	3.0	O	DEC-2018
7	03CS6901	SEMINAR I	2.0	A+	DEC-2017	17	03CS7133	COMPUTATIONAL INTELLIGENCE	3.0	A+	DEC-2018
8	03CS6821	ALGORITHM DESIGN LAB USING C CPP JAVA	1.0	A	DEC-2017	18	03CS7903	SEMINAR II	2.0	O	DEC-2018
Second Semester SGPA :- 8.55						19	03CS7913	PROJECT PHASE I	Successfully Completed		
9	03CS6172	ADVANCED OPERATING SYSTEMS	4.0	B+	APR-2018	Fourth Semester SGPA :- 10.0					
10	03CS6182	MODERN COMPUTER NETWORKS	3.0	A+	APR-2018	20	03CS7914	PROJECT PHASE II	18.0	O	JUN-2019
***** END OF STATEMENT *****											

CGPA - Cumulative Grade Point Average SGPA - Semester Grade Point Average



Prepared by

Checked by



(Seal)

Controller of Examinations

Mahatma Gandhi University

(Established by Kerala State Legislature by Notification No.3431/Leg. CI/85/Law, dated 17th April 1985)



T 094675



Priyadarsini Hills P.O,
Kottayam

Section: EI - XX
Student ID: 1234516

14-Dec-2016

GRADE CARD

Name of the Candidate : VEENA S NAIR
Permanent Register Number (PRN) : 12015930 Degree: BACHELOR OF TECHNOLOGY
Branch : COMPUTER SCIENCE AND ENGINEERING
Name of the Examination : Eighth Semester B Tech Degree Examination May 2016

SUBJECT CODE	SUBJECT NAME	CREDITS	GRADE AWARDED	MONTH & YEAR OF EXAMINATION	APPEARANCE TYPE (R - Regular, I - Improvement, S - Supplementary)
CS010801	High Performance Computing	4	C	May 2016	R
CS010802	Artificial Intelligence	4	C	May 2016	R
CS010803	Security in Computing	4	A	May 2016	R
CS010804L01	E-commerce	4	B	May 2016	R
CS010805G01	Multimedia Techniques	4	A	May 2016	R
CS010806	Computer Graphics Lab	2	B	May 2016	R
CS010807	Project	4	B	May 2016	R
CS010808	Viva Voce	2	C	May 2016	R
SEMESTER-WISE GPA					
I & II Semester		44	6.85	May 2015	
III Semester		28	6.61	Nov 2015	
IV Semester		28	6.32	May 2014	
V Semester		28	6.32	Nov 2014	
VI Semester		28	7.54	May 2015	
VII Semester		28	7.36	Nov 2015	
Aggregate Marks Obtained : 5665 / 8650					

Semester Grade Point Average (SGPA) : 7.93 Grade Points

Cumulative Grade Point Average (CGPA) : 6.98 Grade Points

Checked by:

Section Officer:



CONTROLLER OF EXAMINATIONS



Sree Buddha College of Engineering

Ayathil, Elavumthitta P.O, Pathanamthitta Dist., Kerala, India, Pin: 689 625.

Transfer Certificate

TC No. 1636

Date: 14-08-2019

- | | |
|--|--|
| 1. Name of the Student | : VEENA S NAIR |
| 2. Date of Birth (In figures) | : 12-03-1994 |
| (In words) | : Twelfth of March, Nineteen Ninety-four |
| 3. Religion & Caste | : HINDU, Nair |
| 4. Admission number | : 1826/2017 |
| 5. Date of Admission | : 12-07-2017 |
| 6. Class to which admitted | : First semester M.Tech Degree |
| 7. Date of leaving | : 02-07-2019 |
| 8. Class from which relieved | : Fourth semester M.Tech Degree |
| 9. Branch of study | : Computer Science and Engg. |
| 10. Whether qualified for promotion to a higher class | : Yes |
| 11. Whether the student has paid all the fees | : Yes |
| 12. Whether the student was receipt of fee concession | : No |
| 13. Reason for leaving | : As per her own request |
| 14. Name of the University Examination for which the candidate was last presented from the college | : Fourth Semester M. Tech. Degree Examination, June 2019 |



Principal



SREE BUDDHA COLLEGE OF ENGINEERING

AYATHIL, ELAVUMTHITTA P.O-689 625, PATHANAMTHITTA DIST., KERALA

APPROVED BY AICTE, NEW DELHI & AFFILIATED TO M.G. UNIVERSITY, KOTTAYAM & APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA
Tel.0468 2258100, 9495167190 Fax : 0468 2259100 e-mail: sbcewae@gmail.com website:www.sreebuddhacollege.ac.in

Managed by Sree Buddha Foundation, Kollam. 21

(A sister institution of Sree Buddha College of Engineering, Pattoor, Nooranad)

Prof. Dr. RAJI RAJAN
Principal

SBCE/TEF/CSE/4300/2020

19-12-2020

EXPERIENCE CERTIFICATE

This is to certify that Ms. Veena S Nair, served as Assistant Professor in the Department of Computer Science and Engineering of this college from 09.01.2020 onwards.

This certificate is issued as per the request of Ms. Veena S Nair to be submitted for the PhD application purpose in Kalasalingam Research University, Tamil Nadu.



Raji Rajan
19/12/20
PRINCIPAL

Prof. Dr. Raji Rajan
PRINCIPAL
SREE BUDDHA COLLEGE OF ENGINEERING
AYATHIL, ELAVUMTHITTA-689 625
PATHANAMTHITTA DIST, KERALA

आयकर विभाग
INCOME TAX DEPARTMENT



भारत सरकार
GOVT. OF INDIA

VEENA S NAIR
SURENDRAN NAIR

12/03/1994

Permanent Account Number

APYPN3643P

Signature



Veena
Veena S Nair



ഇൻഡ്യ തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ
 തിരിച്ചറിയൽ കാർഡ്
 ELECTION COMMISSION OF INDIA
 IDENTITY CARD

IOZ0396911



സമ്മതിദായകന്റെ പേര് : വീണ എസ് നായർ

Elector's Name : Veena S Nair

അച്ഛന്റെ പേര് : സുരേന്ദ്രൻനായർ എം
 : ജി

Father's Name : Surendran Nair M G

സ്ത്രീ/പുരുഷൻ: Sex : സ്ത്രീ / F

ജനനതീയതി/ Date of Birth : 12/03/1994

IOZ0396911

വിലാസം : 268 (6/302)

മുളപ്പേരേത്ത്

4, നെടുമ്പ്രയാർ

തോട്ടപ്പുഴശേരി പഞ്ചായത്ത്

പിൻ കോഡ് 689549

Address : 268 (6/302)

Mulapponethu

4, Nedumprayar

Thottappuzhassery Panchayath

Pincode 689549

ഇലക്ടറൽ രജിസ്ട്രേഷൻ ഓഫീസർ
 113 ആറന്മുള അസംബ്ലി നിയോജക മണ്ഡലം
 Electoral Registration Officer
 113 ARANMULA LA Constituency

സ്ഥലം : കോഴഞ്ചേരി

Place : Kozhencherry

തീയതി/Date : 16/01/2013

മേൽവിലാസം മാറിയതിൽ, പുതിയ സ്ഥലത്ത് പേര് ചേർക്കുവാൻ
 അപേക്ഷ നൽകുമ്പോൾ ഈ കാർഡ് നമ്പർ കൃപി
 രേഖപ്പെടുത്തേണ്ടതാണ്.

In case of change in address, mention this Card No. in the
 relevant Form for including your name in the roll at the
 changed address and to obtain the card with the same number.

Veena
 Veena S Nair

ANNEXURE-I

CERTIFICATE FROM THE ORGANISATION WHERE THE CANDIDATE IS EMPLOYED

Certified that ~~Mr./Ms./Mrs.~~ Veena S Nair is employed as assistant professor (Designation) in the Computer science & engineering (Department/Division Name) of Sree Buddha College of Engineering, Pathamthitta, Kerala. (Institution/Industry Name).

We have no objection in forwarding his/her application for the Ph.D. Research Programme.

FOR FULL TIME:

The candidate will be sanctioned leave for the duration of the research programme and will be relieved from duty from _____ to _____ to undertake the full time research work in the University.

FOR PART TIME:

The candidate will be permitted to undertake part time study in the University/College and will be allowed to be present for discussions with the supervisor, attending course works, conduct of experiments and participations in seminars and related presentations. Further the required facilities at our organization will also be provided to the candidate for doing research.

Date: 17/12/2020

Signature of the Head of Organization with office seal



R. Rajan
19/12/20
Prof. Dr. Raji Rajan
PRINCIPAL
SREE BUDDHA COLLEGE OF ENGINEERING
AYATHIL, ELAVUMTHITTA-689 625
PATHANAMTHITTA DIST, KERALA