

Name : Dr. Vijaya Saraswathi Redrowthu
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Department: Computer Science & Engineering
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Experience (in years): Teaching: 19 Research: 7 Others
(if any, specify): NIL

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D.	2022	CSE
2	M.TECH	2011	CSE
3	B.TECH	2004	CSE

2. Teaching and Learning:

2.1. Teaching Interests: Operating Systems, Computer Networks, Cryptography and Network Security, Formal Languages and Automata Theory, Compiler Design, Linux Programming, Software Testing Methodologies, Computer Organization, C and Data Structures,

2.2. Novel Teaching & Learning Techniques adopted: POGIL, Simulations, WIT & WIL, and PPT's

2.3. Involvement in curriculum updating / Design: Updated Cryptography and Network Security, Formal Languages and Automata Theory and Compiler Design.

3. Co-curricular and Extra-Curricular Activities:

3.1. Interests and Hobbies:

- To promote work efficiency and good attitude of life.
- To utilize my Knowledge and skills to the benefit of my organization.
- Love of music.

3.2. CCA/ECA Organized: Encouraged students to participate in various ECA and CCA activities at VNRVJIET.

3.3. CCA/ECA participated: Participated in the activities of Convergence.

3.4. Counseling and Mentoring Activity: Mentor for 3 students of I CSE 2 , 3 students of II CSE-2, 3 students of III CSE-1, and 5 students of IV CSE-2.

3.5. Committees involved in:

Technical and review committee of ICACECS 2020, 2021, 2022.

Department level: Time Table Coordinator.

Institute Level: Member in Stage Decoration committee for Convergence and Institute Annual Day Functions.

4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Conducted:

- A Three Day Workshop on “**Cyber security and emerging technologies**” from 25th March -27th March 2022.
- Guest Lecture on “**More About Software Engineering**” on 18-06-2022.
- Guest Lecture on “**Walk through on Machine Learning with Real-Time Use cases**” on 28-5-2022.
- Guest Lecture on “**Insights on contemporary Technologies-A Project-Based Approach**” on 06-05-2022.
- A Three Day Workshop on **Research in Innovation** from 28th Jan – 30th Jan 2016.
- Guest lecture on **Android** on March 27th 2017.
- Guest lecture on **Cryptography and its Applications** on Feb 19th 2016.

4.2 Attended:

- Attended workshop on **Artificial Intelligence and Deep Learning** and successfully cleared in Assessment test held at Bennett University, Greater Noida, May 4th to May 8th 2020.
- Participated in “**COVID-19 Awareness Quiz**” during 19-24 April 2020, Conducted by Department of Master of Computer Applications, Ramaiah Institute of Technology, Bangalore, India.
- Participated in One-week Faculty Development Programme on “**AI & ML and its Application**” during 18th – 24th May, 2020 Organized by Electronics & ICT Academies, NIT Patna.
- Attended 5 Day FDP on **Cyber Security** organized by Department of ECE and IT collaboration with IETE,ISTE and ACM Student chapters from 02. 06.2020 To 06.06.2020.
- Completed NVIDIA DEEP LEARNING course of **Fundamentals of Deep Learning for Multiple Data Types** in July 2020.
- Completed Two Weeks Online Faculty Development Programme on **Machine Learning for Computer Vision** jointly organized by Electronics & ICT Academies during June 29- July 8, 2020, IIT Guwahati, IIT Roorkee, MNIT Jaipur, NIT Patna, NIT Warangal and PDPM IIITDM Jabalpur.
- Successfully completed **Machine Learning using Python** of online project based course by SkyfiLabs in July 2020.
- Successfully completed **AI For Everyone** an online non-credit course authorized by deeplearning.ai and offered through Coursera in August 2020.
- Completed 12-week NPTEL - AICTE FDP course on “**Introduction to Internet of Things**” with a score of **83%** from July-Oct 2018.
- Completed 12-week NPTEL - course on “**Computer Networks and Internet Protocol**” from July-Oct 2018.
- Completed 12-week NPTEL - AICTE course on “**Cryptography and Network Security**” with a score of 79% from Jan-April 2018.
- Completed 8-week NPTEL - AICTE course on “**Wireless Ad Hoc and Sensor Networks**” with a score of 71% from Feb-Mar2018.

- Attended 5 day FDP on **Block Chain Technology-Its Applications** during 17-21st December 2018 at VNRVJIET.
- Attended 7day FDP on “**Sensor Networks and IOT**” from 27th Nov to 2nd Dec 2016.
- Attended two day FDP on “**Internet of Things & Its Applications**” at GRIET from 4-5 December, 2015.
- Attended Workshop “**Code Based Crypto Workshop (CBCW-2015)**” during September, 28 - 30, 2015.
- Attended two day workshop on “**Recent Trends in Compiler Construction Tools**” during March 26th to 27th 2015 at vnrvjiet.
- Attended two day workshop on “**NS3 Simulator**” on April 3rd to 4th 2015 at Osmania University.
- Attended three days workshop on “**Network security and cyber Forensics**” on 23rd to 25th Oct 2013
- Attended “**International conference on Data Sciences(InDaS)** at VNR VJIET on 28rd to 30th Feb 2014
- Attended 6 day workshop on **Research Methodologies** at JNTUH during Dec 16th to Dec 21st 2013.

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: NIL

5.2. Articles / Chapters published in Books:

1. Road Traffic Counting and Analysis Using Video Processing, January 2021
DOI: 10.1007/978-981-15-5400-1_62 In book: Intelligent System Design. Authors: A. Kousar Nikhath N. Venkata Sailaja R. Vasavi Vijaya Saraswathi Redrowthu
2. Brilliant Corp Yield Prediction Utilizing Internet of Things, January 2020
DOI: 10.1007/978-981-15-1097-7_75 In book: Data Engineering and Communication Technology. Authors: Vijaya Saraswathi Redrowthu Sravani Nalluri Somula Ramasubbareddy
E. Swetha.
3. Chronic Heart Disease Prediction Using Data Mining Techniques January 2020
DOI: 10.1007/978-981-15-1097-7_76
In book: Data Engineering and Communication Technology
Authors: Sravani Nalluri Vijaya Saraswathi Redrowthu Somula Ramasubbareddy E. Swetha.
4. Secured Cluster-Based Distributed Dynamic Group Key Management for Wireless Sensor

Networks January 2020. DOI: 10.1007/978-981-32-9585-8_18 In book: Computational Network Application Tools for Performance Management. Authors: Vijaya Saraswathi Redrowthu, L. Padma Sree K. Anuradha

5.3. Books published as single author or as editor:

1. Introduction to AI/ML and Data Science

Authors: Dr. G N Beena Bethel, Dr. G. Prasanthi, Dr. Vijaya Saraswathi Redrowthu, Mrs. G. Laxmi Deepthi

Publishers: RK Publications, India.

2. Computer Networks

The way of interconnecting and communicating people with other people.

Authors: Dr Kranthi Kumar Singamaneni, Mrs Vijaya Saraswathi Redrowthu, Mrs Vasavi Ravuri.

Publishers: LuLu Publications 2020, USA.

5.4. Projects Guided:

a) UG:

- Intrusion Detection System using Machine Learning Algorithms(2020)
- Strong Location Based Key Management Scheme in Wireless Sensor Networks(2020)
- Conditional Identity-Based Broadcast Proxy Re-Encryption and Its Application to Cloud Email (2019)
- Offline Signature Verification using Local Patterns
- Tollgate management
- Public Distribution network
- Online Tele Network as mini Project
- Online Buss Pass Registration Form as mini Project
- Portal for Indian Political Scenario

b) PG:

- Sybil Attack Detection in Wireless Sensor Networks (2020)
- Online Voting System(2019)

5.5. Research Interests: Security in wireless sensor Networks, Cryptography.

5.6. Ph.D. students: NA

a) Enrolled:

b) Submitted:

c) Awarded:

5.7. Papers published in reviewed journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Deep Learning Regression-Based Retinal Layer Segmentation Process for Early Diagnosis of Retinal Anamolies and Secure Data Transmission through ThingSpeak	Mobile Information Systems, Volume 2022 Hindawi publishers	https://doi.org/10.1155/2022/8960132	SCI,Scopus, Google Scholar	International
2	Support Vector Based Regression Model to Detect Sybil Attacks in WSN	International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.3, May – June 2020.	2278 - 3091	Scopus, Google Scholar	International
3	Dynamic group key management scheme for clustered wireless sensor networks	Int. J. Grid and Utility Computing, Vol. 11, No. 6, 2020.	ISSN online 1741-8488	Scopus, Google Scholar, Web of science, ESCI Clarivate Analytics.	International Journal
4	Detecting Sybil Attack In Wireless Sensor Networks Using Machine Learning Algorithms	IOP Conference Series Materials Science and Engineering, Vol 1042, January 2021	DOI: 10.1088/1757-899X/1042/1/012029	Scopus, Google Scholar	International Journal
5	Multi-stage Key Management Scheme for Cluster based WSN	International Journal of Communication Networks and Information Security (IJCNIS), Vol. 10, No. 3, December 2018.	ISSN: 2076-0930	Scopus	International Journal

6	Key Management Schemes in Wireless Sensor Networks: A Survey	CiiT International Journal of Wireless Communication, Vol 8, No 5. pg.no 185-189		Google Scholar	International Journal
7	Design of Kernel Module for providing a Feasible Solution to ARP Spoofing Problem	IJEECS Issue-2 Volume-8 Pg.no 28-31	2347-2820	Google Scholar	International Journal

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	A LSTM based Deep Learning Model for Text Summarization	ICECAT 2022	International Conference(IEEE SCOPUS)	2022/12/1
2	Next Word Prediction in Telugu using RNN Mechanism	ICAISS 2022	International Conference(IEEE SCOPUS)	2022/11/24
3	Detection of Synthesized Videos using CNN	ICAISS 2022	International Conference(IEEE SCOPUS)	2022/11/24
4	An Improved Approach towards Network Security of an Organization	ICEARS 2022	International Conference(IEEE SCOPUS)	2022/3/16
5	Face Detection and Comparison Using Deep Learning	ICACECS 2021	International Conference(Springer)	2022/2/22
6	Heart Disease Prediction Using Decision Tree and SVM	ICACECS 2021	International Conference(Springer)	2022/2/22
7	Smart Attendance System Using Speech Recognition	ICSSIT-2022	International Conference(IEEE SCOPUS)	2022/1/20
8	Automation of Recon Process for Ethical Hackers	ICONAT-2022	International Conference(IEEE SCOPUS)	2022/1/21
9	An Intelligent College Enquiry Bot using NLP and Deep Learning based techniques	ICONAT-2022	International Conference(IEEE SCOPUS)	2022/1/21

10	Smart Farming: The IoT based Future Agriculture	ICSSIT-2022	International Conference(IEEE SCOPUS)	2022/1/20
11	Dynamic and Probabilistic Key Management for Distributed Wireless Sensor Network	ICCIC-2016	International Conference(IEEE SCOPUS)	15/12/2016 to 17/12/2016
12	Cluster Based Distributed Dynamic Group Key Management for Wireless Sensor Networks	RAAC-2017	International Conference(Springer SCOPUS)	23 rd -25 th November 2017.
13	Mutual and Multilevel Key Management Protocol in the Dynamic Cluster based WSN, at Akshaya College of Engineering and Technology, Coimbatore, India.	ICICSS-2018	International Conference(IEEE SCOPUS)	20-21 September, 2018
14	“Performance Analysis of Wireless Body Area Sensor Analytics using Clustering Technique”, 8th IEEE ICCSP 2019, 4-6th April, 2019, Chennai.	ICCSP 2019	International Conference(IEEE SCOPUS)	4-6th April, 2019, Chennai.
15	Brilliant Corp Yield Prediction Utilizing Internet of Things, at Stanley College of Engineering and Technology for Women (SCETW), Abids, Hyderabad.	ICDECET 2019	International Conference(Springer SCOPUS)	15th – 16th March 2019
16	Chronic Heart Disease Prediction using Data Mining Techniques, at Stanley College of Engineering and Technology for Women (SCETW), Abids, Hyderabad.	ICDECET 2019	International Conference(Springer SCOPUS)	15th – 16th March 2019
17	Detecting Sybil Attack In Wireless Sensor Networks Using Machine Learning Algorithms, at Vardaman college of Engineering, Hyderabad, India	ICMLSC 2020	International Conference - IOP Conference Series: Materials Science and Engineering, SCOPUS.	18th-19th December 2020
18	A Performance Comparison of Machine Learning Approaches on Intrusion Detection Dataset, Organized at Francis Xavier Engineering College, Tirunelveli, India.	ICICV 2021	International Conference(IEEE SCOPUS)	4-6, February 2021
	Leaf Disease Detection and			

19	Remedy Suggestion Using Convolutional Neural Networks organized by Surya Engineering College, Erode, India on 2021,	ICCMC 2021	International Conference(IEEE SCOPUS)	April 8-10, 2021
20	Road Traffic Counting and Analysis Using Video Processing organized by CMR Technical Campus, Hyderabad.	ISCI 2019	International Conference(IEEE SCOPUS)	2 nd November 2019

5.9. Sponsored research Projects: NIL

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects: NIL

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received: NIL

7. Motto:

- "Where the heart is willing, it will find a thousand ways. Where it is unwilling, it will find a thousand excuses."
- Sincerity, Honesty, Hard work, Dedication, politeness, Gratitude, Optimistic...these are the Keywords which will go on to lead a better life.....