



Name : VIJAYASARASWATHI REDROWTHU  
Designation: Assistant Professor  
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Experience (in years): Teaching: 16      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.	Pursuing	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:

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 Research in Innovation from 28 Jan - 30 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 4<sup>th</sup> to May 8<sup>th</sup> 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 IITDM 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** 17-21<sup>st</sup> 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 26<sup>th</sup> to 27<sup>th</sup> 2015 at vnrvjiet.
- Attended two day workshop on “**NS3 Simulator**” on April 3<sup>rd</sup> to 4<sup>th</sup> 2015 at Osmania University.
- Attended three days workshop on “**Network security and cyber Forensics**” on 23<sup>rd</sup> to 25<sup>th</sup> Oct 2013
- Attended “**International conference on Data Sciences(InDaS)** at VNR VJiet on 28<sup>rd</sup> to 30<sup>th</sup> Feb 2014
- Attended 6 day workshop on **Research Methodologies** at JNTUH during Dec 16<sup>th</sup> to Dec 21<sup>st</sup> 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: **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 / Internati onal
1	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	Internati onal

2	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
3	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
4	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
5	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
6	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	Dynamic and Probabilistic Key Management for Distributed Wireless Sensor Network	ICCIC-2016	International Conference(IEEE SCOPUS)	15/12/2016 to 17/12/2016
2	Cluster Based Distributed Dynamic Group Key Management for Wireless Sensor Networks	RAAC-2017	International Conference(Springer SCOPUS)	23 <sup>rd</sup> -25 <sup>th</sup> November 2017.
3	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
4	“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.
5	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
6	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
7	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
8	A Performance Comparison of Machine Learning Approaches on Intrusion Detection Dataset,	ICICV 2021	International Conference(IEEE SCOPUS)	4-6, February 2021

	Organized at Francis Xavier Engineering College, Tirunelveli, India.			
9	Leaf Disease Detection and 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
10	Road Traffic Counting and Analysis Using Video Processing organized by CMR Technical Campus, Hyderabad.	ISCI 2019	International Conference(IEEE SCOPUS)	2 <sup>nd</sup> 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.....