## **Personal Information**

Name	Dr. Aruna Rao S.L
Experience	14 Years
Designation	Professor & HoD
Email Id	it.hod@bvrithyderabad.edu.in
Area of Specialization	Computer Networks & Security



## **Educational Qualifications**

Doctoral Degree	Ph.D.	Computer Science & Engineering
PG Degree	M.Tech.	Networking & Internet Engineering
UG Degree	B.E	Information Science & Engineering

## Papers Published

#### International Journal Publications

- 1. P S Latha Kalyampudi, Dr P Venka Krishna, **Aruna Rao S. L.,** S Rama Devi, published a paper titled "Predictive Resource Demand Based Load Balancing Strategy for Fog Computing" *Design Engineering*, Pages: 7181-7191, Vol 2021: Issue 08, ISSN: 0011-9342, <a href="http://www.thedesignengineering.com/index.php/DE/article/view/5727">http://www.thedesignengineering.com/index.php/DE/article/view/5727</a> (SCOPUS INDEXED)
- 2. **Aruna Rao S.L.,** Dr. M Shanmukhi published a paper titled "Exploring the Wireless Network Energy Conserving Mechanisms for Internet of Things" PENSEE Journal, Vol 51, Pages: 413-427, May 2021, ISSN: 0031-4773
- 3. Meenakshi Bhrugubanda, **Aruna Rao S.L.,** M Shanmukhi, AnnaluriSreenivasa Rao, published a paper titled "Sustainable and Intelligent IoT Based Precision Agriculture Smart Farming", International Journal of Solid State Technology, Volume:63, Issue 6, Pages:17824-17833, <a href="http://solidstatetechnology.us/index.php/JSST/article/view/7839">http://solidstatetechnology.us/index.php/JSST/article/view/7839</a>, ISSN: 0038-111X (**SCOPUS INDEXED**)
- 4. Dr M Shanmukhi, **Aruna Rao S.L.,** Ms Nazia Tabassum, Kuruva Harinath published a paper titled "NRPCAN: A Novel Routing Protocol for Cognitive Ad-Hoc Networks", in Journal of Critical Reviews (JCR. 2020), Vol.7, Issue.15,Pages1589-1597, ISSN- 2394-5125 <a href="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng="http://www.jcreview.com/index.php?iid=2020-7-15.000&&jid=197&lng=1020-7-10

- 5. **Aruna Rao S.L.,** K.V.N. Sunitha published a paper titled "Trusted Secure Geographic Routing Protocol for Detecting Insider Attacks in MANET" in International Journal of Engineering Studies, ISSN 0975-6469 Volume 8, Number 2 (2016), pp. 187-197.
- 6. Aruna Rao S.L, K.V.N. Sunitha published a paper titled "Secure Geographical routing in MANET using the Adaptive Position Update" in International Journal of Advanced Computer Research Volume-4 Number-3 Issue-16 September-2014, Pages:785-794, (ISSN (print): 2249-7277 ISSN (online): 2277-7970)

#### **International Conference Publications**

- 1. Rama Devi S, Subetha T, Aruna Rao S.L, Mahesh Kumar M, published a paper titled "Enhanced Learning Outcomes by Interactive Video Content H5P in Moodle LMS" in 6<sup>th</sup> International Conference on Inventive Systems and Control (ICISC 2022), Year: January 2022 Pages: 161-175, DOI:, Springer Lecture Notes in Networks and Systems, ISSN: 2367-3370, (SCOPUS INDEXED)
- 2. Aruna Rao S.L, K.V.N.Sunitha published a paper titled "Position Verification Technique for Secure Geographical Routing in MANET in "Thirteenth International Conference on Wireless and Optical Communications Networks (WOCN) Year: 2016 Pages: 1 12, DOI: 10.1109/WOCN. 2016.7759889, IEEE Conference Publications, ISSN: 2151-7703, (SCOPUS INDEXED)

## National Conference Publications

- 1. Aruna Rao S.L, K.V.N. Sunitha "Guard against attack in mobile adhoc network routing", National Conference on Advanced Pattern Mining and Multimedia computing AP-MMC10 February 25-26, 2010.
- **2. Aruna Rao S.L**, K.V.N. Sunitha "Increasing Performance level of DSR protocol in presence of malicious nodes", National Conference ATCON'09 November 2009.

#### Reviewer / Editor

Reviewer for International Conference on "Computational Intelligence and Network Security

## **Funded Projects**

i. Ongoing:

Received a grant of 10,000USD azure credits from AI for Earth - Microsoft in October 2021 *Title :"Precision Agriculture"* (File No: AI4E-2262-R5G9-21100412) PI- Dr. K. V. N. Sunitha, Principal, BVRITH CO-PI-I – Dr. S L Aruna Rao, HoD-IT, BVRITH

ii. Applied & Under Review –NA

## iii. Completed:

iv. Received a research grant of 38.5 lakhs from DST TIDE project in March 2013 for three years. *Title*: "Medicine Recognition System and Alerting Device for Geriatrics and Visually Challenged"

(File No: SEED/TIDE/043/2013(G) dated 12/08/2015)

PI- Dr. K. V. N. Sunitha, Principal, BVRITH

CO-PI-I – Mrs. S L Aruna Rao, HoD-IT, BVRITH

Co-PI-II – Dr. J. Naga Vishnu Vardhan, Professor & HoD-ECE, BVRITH

#### Patent Filed

- 1. Title "SMART CLASSROOM VIRTUAL REALITY HEAD MOUNTED DISPLAY DE-VICE FOR VISUAL-SPATIAL LEARNERS" **Application no**: 202041052429, Date filed: 02/12/2020
- 2. Title "IAEC- SYSTEM: INTELLIGENT IOT SYSTEM FOR AGRICULTURE ENVIRONMENT CONTROL" Application No.202041010147 A, Publication Date: 13/03/2020
- 3. Title: **HPML- Control:** HIGH-SPEED TRAIN SPEED PREDICTIVE CONTROL USING ANFIS MODELING AND MACHINE LEARNING

#### **Book Published**



Published a book titled "NETWORK SECURITY", ISBN-13: 979-8671985436, independently published on 3<sup>rd</sup> August 2020

## **Book Chapter Published**

1. Aruna Rao S.L, K.V.N. Sunitha published a chapter titled "Secure Geographical Routing with an efficient Location verification mechanism" in book titled "Innovations in Computer Science & Engineering", Springer LNS Series, ISBN: 978-981-10-3817-4, July 2016.



# Aruna Rao S L 🧪



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AR <sup>-</sup>	TICLES	CITED BY	Y (	CO-AUTHORS				
	TITLE	₽	:		CITED BY	YEAR		
	Secure geographical routing in MANET using the adaptive position update  ASL Rao, KVN Sunitha International Journal of Advanced Computer Research 4 (3), 785							
	Position verification technique for secure geographical routing in MANET  SLA Rao, KVN Sunitha  2016 Thirteenth International Conference on Wireless and Optical					2016		
	Secure Geographical Routing Using an Efficient Location Verification Technique SLA Rao, KVN Sunitha Innovations in Computer Science and Engineering, 177-184				2017			
	Attacks AR SL, I	s in MANI KVN Sunith	ET a	graphic Routing Protocol for Detecting Insider ngineering 8 (2), 187-197		2016		