

# VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

## KNOWLEDGE ASSET 2018-19

**Name:** Naregalkar Akshay Rangnath



**Designation:** Assistant Professor

**Department:** Electronics & Instrumentation Engineering

**Mail ID:** akshay\_n@vnrvjiet.in

**Experience (in years): Teaching: 14                      Research:                      Others (If any, Specify):**

### 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	PhD Pursuing		Instrumentation
2	M. Tech.	2007	VLSI SD
3	B.E.	2003	Instrumentation

### 2. Teaching and Learning:

- 2.1. Teaching Interests: Instrumentation , Automation , LabVIEW , PLC
- 2.2. Novel Teaching & Learning Techniques adopted: Activity based learning (POGIL)
- 2.3. Involvement in curriculum updating / Design:- Yes

### 3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: Cricket
- 3.2. CCA/ECA Organized: 5
- 3.3. CCA/ECA participated: 11
- 3.4. Counseling and Mentoring Activity: B. Tech. Students
- 3.5. Committees involved in:
  - Department level: 1
  - Institute Level: 1

### 4. Conference / Workshop / Seminar / Guest Lectures:

- 4.1 Conducted:5
- 4.2 Attended:27

### 5 Academic Contribution and Research & Consultancy:

- 5.1 **Invited Lectures:-** 1 at VIT University
- 5.2 **Articles/Chapters published in Books:-** 1 (Lecturer Notes in Networks & Systems Communicated)
- 5.3 Books published as single author or as editor:-
- 5.4 **Projects Guided:**
  - a) UG: 37
  - b) PG: 5
- 5.5 **Research Interests:** Automation & Control

5.6 Ph.D students:

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	Online Auto Selection of Tuning Methods and Auto Tuning PI Controller in FOPDT Real Time Process-pH Neutralization	Elsevier Energy Procedia Vol. 117, June 2017, pp. 1109-1116 (Scopus Indexed)	ISSN: 1876-6102	1.02 (SJR)	International
2	Process Identification with Autoregressive Linear Regression Method using Experimental Data: Review	Indian Journal of Science and Technology , Vol .9, Issue 39, October 2016,pp. 1-7.(Scopus Indexed)	ISSN 0974-5645	0.25 (SJR)	International
3	Self Adaptive Design Implementation of Auto Tuning Algorithm for PI Controller in Real Time pH Neutralization Plant Operation	International Research Journal of Engineering and Technology (IRJET) Vol: 03 Issue: Oct - 2016,pp 1267-70.	e-ISSN: 2395 - 0056	Google Scholar, DOAJ Indexed	International
4	Design And Implementation of Algorithm for Real- Time Patient Monitoring in Ambulance While Transit	Journal on Instrumentation and Control Engineering, Vol.4 ,Issue 1 , Nov-Jan 2016, , pp. 17-23.	ISSN 2321-113X	Google Scholar Indexed	International
5	Multichannel Data Acquisition And Control System Using Labview	International Journal Of Embedded & VLSI System ,Vol. 3, Issue 12 Dec 2014	ISSN: 2349 - 8129	Google Scholar Indexed	International
6	A Robust And Secure Approach To Transfer A Secret Image Using Reversible Color Transformations For Confidentiality	International Journal Of Professional Engineering Studies Vol. V /Issue 5 /Oct 2015			International
7	Real Time Monitoring And Control Of Neonatal Incubator Using LabVIEW	International Journal of Application or Innovation in Engineering & Management, Volume 2, Issue 4, April 2013	ISSN: 2319-4847.	Google Scholar, DOAJ Indexed	International
8	Integration And Automation Of Systems For Product Identification And Segregation.	International Journal of Application or Innovation in Engineering & Management, Volume 2, Issue 4, April 2013	ISSN: 2319-4847	Google Scholar, DOAJ Indexed	International

9	Real Time Automated Control of Industrial Processes with PLC –LABVIEW Communication	International Journal for Research in Science & Advanced Technologies (IJRSAT) , Issue-1, Vol-1, August 2012, pp: 035-038	ISSN: 2319-2690	Google Scholar, DOAJ Indexed	International
10	Implementation Of 3D DWT With 5/3 LeGall Filter For Image Processing	International Journal on Computer Science and Engineering IJCSE – May 2012, Vol. 4, No. 5	ISSN: 0975–3397.	ICI Indexed	International
11	Multi-Vendor Remote Monitoring and Control System for Hydraulic Drive Systems	CVR Journal of Science and Technology Vol 3, Dec 2012	ISSN: 2277-3916.		National
12	Multiplierless Design for Multilevel Forward and Inverse 2D Discrete Wavelet Transform	International Journal for Computer Applications- IJCA , March 2011 (Indexed in Scopus Database)	ISSN 0975 – 8887	0.8 (DOAJ, ProQuest)	International
13	High Speed Power Efficient Asynchronous Adders	International Journal for Computer Applications- IJCA ,March2011(Indexed in Scopus Database)	ISSN 0975 – 8887	0.8 (DOAJ, ProQuest)	International

### 5.8 Papers presented at National / International Conference:

S. No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Bio-Signal System Design For Real Time Ambulatory Patient Monitoring and Abnormalities Detection System	6 <sup>th</sup> International Conference On Innovations In Electronics & Communication Engineering (ICIECE - 2017) ,Hyderabad	International	July 2017
2	Auto Tuning of PI Controller in FOPDT Real Time Process-pH Neutralization	First international conference on - Power Engineering Computing and CONTROL,(PECCON 2017) VIT University , Chennai, India.	International	March 2017
3	Design & Implementation of Real Time Bio-Signal Acquisition System for Quality Health Care Services for the Population of Rural India	IEEE International Conference On Recent Trends In Electronics Information Communication Technology, May 20-21, 2016, India , Print ISBN:978-1-5090-0773-8 ,pp. 1359-1363.	International (Indexed in Scopus Database)	May 2016
4	Design and Implementation of Fuzzy Based Robust Controller for Process Control Instrumentation	IEEE's International Conferences For Convergence of Technology (I2CT 2014) , Pune ,India	International (Indexed in Scopus Database)	April 2014
5	ECG Noise Removal and QRS Complex Detection Using UWT	Electronics and Information Engineering (ICEIE), 2010 International Conference On -ICEIE, Kyoto, Japan.	International (Indexed in Scopus Database)	August, 2010
6	An Efficient Approach for Sensor Deployments in	INTERACT – 2010Sathyabama University, Chennai, India.	International (Indexed in	Dec' 2010

	Wireless Sensor Network		Scopus Database)	
7	FPGA Implementation of Multiplierless 5/3 Legall DWT Using Lifting Approach	International Conference & Workshop on Emerging trends in technology, ICWET- 2011, TCET, Mumbai	International (Indexed in Scopus Database)	Feb' 2011
8	Novel Asynchronous Adders	International Conference & Workshop on Emerging trends in technology, ICWET- 2011, TCET Mumbai	International	Feb' 2011
9	ECG Signal Denoising With Undecimated Wavelet Transform by Using Labview	1st International Conference on Emerging Trends in Signal Processing and VLSI design, GNEC, Hyderabad, India.	International	June 2010
10	Implementation of 24-bit Delta- Sigma Analog-to-Digital Converter	International Conference on Biomedical Engineering & Assistive Technologies (BEATs-2010), N.I.T. Jalandhar, India.	International	Dec' 2010
11	Low Power Asynchronous Dynamic Adders	International conference on mobile internet devices (ICMID-2010), GRIET, Hyderabad, India	International	Dec' 2010
12	Thermistor Linearization with Dual Slope Resistance to Digital Converter Using LabVIEW",	National conference on automation, communication & computing(NCACC-2010),GITAM University, Visakhapatnam , India.	national	Dec' 2010
13	FPGA implementation of multiplierless lifting based 2d DWT for 5/3 legal wavelet filter	National conference NCACC-2010), GITAM University, Visakhapatnam, India.	national	Dec' 2010

### 5.9 Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	Design and Implementation of Algorithm for Real-Time Patient Monitoring In Ambulance While Transit Role: Principal Investigator.	UGC , India	Two Years	Rs. 4.45 Lakh.	Completed

### 5.10 Consultancy Projects: -

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

### 6. Awards / Honors received:-

Teaching Excellence Award in Aurora's Engineering College , Bhongir

**7. Motto:** "DO ENGINEERING"