#### Dr. Venkata A N Ravi Kumar Dwarapu

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# Career Objective :

To work in a creative, challenging environment and achieve growth oriented career in an organization where I can contribute best to the growth of the organization and my technical skills.

#### Teaching Experience

- ♦ Currently working as Associate Professor in Department of ECE in Gayatri Vidya Parishad College of Engineering for Women from July 1,2021 to till date.
- Previously worked as Assistant Professor in Department of ECE in Gayatri Vidya Parishad College of Engineering for Women from August 29,2009 to June 30,2021.(Total Experience 12 Years)

Qualification	School/College	University/Board	Period	Percentage of Marks
Ph.D	University College of Engineering JNTUK, Kakinada	J.N.T.U,Kakinada	2012-2019	-
M.Tech (Microwave & Radar Engineering)	Andhra University College of Engineering,AU, Visakhapatnam.	A.U	2007-2009	8.82 CGPA
B.Tech(Elecronics and Communication Engineering)	SISTAM College of Engineering, Srikakulam	JNTU	2002-2006	70.74
Intermidiate	Vikas Junior College, Visakhapatnam	Board of Intermidiate, A.P.	2000-2002	85.55
10 <sup>th</sup>	St.Josephs School, Srikakulam	ICSE, New Delhi	2000	69.4

## Technical Skills:

◆ Languages : C Language.◆ Software Packages : MATLAB

#### **Personality Traits:**

- ♦ Ability to work in teams.
- ♦ Adaptability to new environments.
- Ability to work in time bound crisis situations.

♦ Hard working and result oriented.

#### **Member Ship:**

- ◆ Previously a Member of IEEE and now a member of "International Association of Engineers(IAENG)".
- ♦ Member of "The Institution of Engineers(IEI)".

#### Subjects Taught:

**Electronic Devices and Circuits** 

Pulse and Digital Circuits

**Principles of Communications** 

Linear and Digital Ic Applications

Signals and Systems

Linear Ic Applications

Digital Signal Processing

Random Variables and Stochastic Processes

**Analog Communication** 

#### **Online Courses (NPTEL):**

S.No.	Title of Lecture	Organization Details	Duration & Dates	Score	
1	Analog Communications	NPTEL	July-Oct 2018	90%	1%Topper(Gold Medal)
2	Discrete Time Signal Processing	NPTEL	July-Oct 2018	82%	5% Topper(Elite)

#### Journal Publications :

1) **D.V.A.N.Ravi Kumar**, "Conditioned Measurement Fused Estimate Unscented Kalman Filter for Underwater Target Tracking using Acoustic Signals Captured by Towed Array" *Applied Acoustics*, Vol.174, pp107742, Mar.2021.(Publisher:ELSEVIER)

Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

2) **D.V.A.N.Ravi Kumar**," Hybrid Unscented Kalman Filter with Rare features for Underwater Target tracking using Passive Sonar Measurements" *Optik*, Vol.226, No.1, pp.1-13, Jan. 2021. (Publisher: ELSEVIER)

Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

3) D.V.A.N.Ravi Kumar, S.Koteswara Rao and K.Padma Raju, "A Novel Estimation algorithm for torpedo tracking in undersea environment" *Journal of Central South University*, Vol.26, No.3, pp.673-683, April 2019. (Publisher: SPRINGER)

Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

- **4) D.V.A.N.Ravi Kumar**, S.Koteswara Rao and K.Padma Raju, "Estimate Merge Technique Based Algorithms to Track an Underwater Moving Target using Towed Array's Bearing-Only Measurements" *Sadhana*, Vol. 42, Issue 9, 1617-1628,2017. (Publisher:SPRINGER) **Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR**
- 5) **D.V.A.N.Ravi Kumar**, S.Koteswara Rao and K.Padma Raju, "A Novel Stochastic Estimator using Pre-Processing Technique for Long Range Target Tracking in heavy Noise Environment", *Optik*, vol. 127, no. 10, pp. 4520-4530, 2016. (Publisher: ELSEVIER)

  Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR
- 6) D.V.A.N.Ravi Kumar, S.Koteswara Rao and K.Padma Raju, "Integrated Unscented Kalman filter for underwater passive target tracking with towed array measurements", Optik,vol.127,no.5,pp.2840- 2847,2016. (Publisher:ELSEVIER)
  Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

7) D.V.A.N.Ravi Kumar, S.Koteswara Rao and K.Padma Raju, "Performance Evaluation of a Novel Hybrid Stochastic Algorithm while Tracking an Underwater Moving Target", International Journal of Pure and Applied Mathematics, Vol. 117 Issue 18, 373-378,2017.
Indexed by: SCOPUS, GOOGLE SCHOLAR

**8) D.V.A.N.Ravi Kumar**, S.Koteswara Rao and K.Padma Raju ,"Underwater Bearings-Only Passive Target Tracking Using Estimate Fusion Technique", *Advances in military technology*,vol.10, no.2,pp.31-44,2015.

Indexed by: SCOPUS, GOOGLE SCHOLAR

9) **D.V.A.N.Ravi Kumar**, S.Koteswara Rao and K.Padma Raju, "Under Water Active Target Tracking Using Kalman Filter", *International journal of Engineering Research and Technology*, Vol. 2 Issue 10, 3982-3988,2013.

**Indexed by: GOOGLE SCHOLAR** 

**10**) G.N.Durga and **D.V.A.N.Ravi Kumar**, "Gdi Technique Based Carry Look Ahead Adder Design", *IOSR Journal of VLSI and Signal Processing*, Vol.4, Issue 6, Ver1, pp. 1-9, Nov-Dec 2014.

**Indexed by: GOOGLE SCHOLAR** 

**11) D.V.A.N.Ravi Kumar**, "Advanced Stochastic Algorithms for Tracking Applications-A Survey", Signal Processing, (Publisher: ELSEVIER) (**Under Review**).

Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

**12**) **D.V.A.N.Ravi Kumar**, D. Suneetha and R. Swathi, "Spatial and Temporal measurement fusion based EKF for passive underwater target tracking application", IETE Journal of Research. (Publisher: Taylor and Fransis) (**Under Review**).

Indexed by: SCI, SCOPUS, GOOGLE SCHOLAR

#### **Conferences Publications:**

- 1) **D.V.A.N.Ravi Kumar**, S Koteswara Rao, K Padma Raju, "Improved UKF with time and space averaging of measurements" ,Proceedings of a two day conference on VLSI design, signal processing, image processing, communications and embedded systems(VSPICE2K18)",19-20,july 2018.
- 2) D.V.A.N.Ravi Kumar, S.Koteswara Rao and K.Padma Raju, "Design of a Robust Estimator for Submarine Tracking in complex environments", Proceedings of ICMEET-2017, "Hyderabad,9-10 sept.2017 published In Microelectronics, Electromagnetics and Telecommunications, springer,Singapore,2018. Part of the Lecture Notes in Electrical Engineering book series (LNEE, volume 471)pp.273-282.

Indexed by: SCOPUS, GOOGLE SCHOLAR

3) S.Koteswara Rao, **D.V.A.N.Ravi Kumar** and K.Padma Raju, "Combination of Pseudo Linear Estimator and modified gain bearings-only extended Kalman filter for passive target tracking in abnormal conditions", *Ocean Electronics(SYMPOL)*, Kochi, pp3-8,2013.

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#### **Conferences with out Publications:**

4) D.V.A.N.Ravi Kumar, S.Koteswara Rao, and K.Padma Raju, "Torpedoes tracking in underwater scenarios using advanced stochastic estimator"," knowledgwe based inventive Telecommunication systems"(NCKITS-2017) in KKR & KSR institute of technology and sciences, Guntur on 16-18, March, 2017.

#### **Book Chapter Publications:**

1) D.V.A.N.Ravi Kumar, S.Koteswara Rao and K.Padma Raju, "A Couple of Novel Stochastic Estimators Designed and Tested to Promote the Usage of Towed arrays on the Regular basis for Passive tracking". Proceedings of ICAIESES 2017 ,Madanapalle, 27-29 April,2017,published in Artificial Intelligence and Evolutionary Computations in Engineering Systems pp 645-656.Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 668)

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#### **Summary of Research Publications**

- Total No of Articles published:15+2\*
  - o Total No of Articles published in Journals:10+2\*

Total No of Articles published in SCI Journals:6 Total No of Articles published in Scopus Journals:6+2(SCI Journals included) Total No of Articles published in Google scholar indexed:8+2

# Total No of Articles published through Conferences:4 Total No of Articles published in Scopus:3

#### Projects Guided:

• Guided 22 B.Tech Projects and 2 M.Tech Projects.

## FDP's, Workshops & Conferences Attended:

- A three day workshop on "Custom Analog and Digital IC Design using Mentor EDA Tools(ADICD-2018)", GVPCEW, 27-29 September, 2018.
- A Two day Workshop on "Signal Processing and Communication Systems" Organized by the GVPCEW,15-17 Nov,2017.
- Attended one week training program on "Data Analytics with R and TABLEAU", at AU college of Engineering, Visakhapatnam on 8-12 January, 2017.
- Attended a FDP on "Advanced Digital Signal Processing and Applications" at MVGR
   College of Engineering(A), Vizianagaram on 8-13, November, 2016.
- Workshop on "Electromagnetics and RF Fundamentals(EMRF-2016)" conducted at Gayatri
   Vidya Parishad College of Engineering for Women in 22-24 Jan, 2016.
- Workshop on "Cognitive Radio Technologies (CRT-2015)" conducted at Gayatri Vidya Parishad College of Engineering for Women in 25-26 Sep.,2015.
- Attended 3rd International Conference on "Micro-Electronics, Electromagnetics and Telecommunications" (ICMEET-2017) at BVRIT hyderabad college of Engineering for women, Hyderabad on 9-10, September, 2017.
- Attended a joint international conference on Artificial Intelligence and Evolutuionary computations in Engineering systems(ICAIECES-2017)& power, circuit and information technologies(ICPCIT-2017) organized by department of EEE,CSE & ECE at Madanapalle institute of technology & science,madanapalle,chittor, on 27-29 April,2017.
- Attended national conference on "knowledgwe based inventive Telecommunication systems" (NCKITS-2017) in KKR & KSR institute of technology and sciences, Guntur on 16-18, March, 2017.
- Attended the seminar on "MATLAB &Simulink for engineering education" by MathWorks at visakahapatnam on 26,February,2015
- Attended International symposium on "Ocean Electronics (SYMPOL-2013)" organized by centre for ocean electronics, Department of electronics, Cochin university of science and technology during 23-25 Oct., 2013.
- Attended the two-week audit course on "Research Methodologies" Conducted by Directorate of Research & Development, JNTUK, Kakinada during 1-15 May, 2013.

- Attended the two-week audit course on "Intellectual Property Rights and Patents" Conducted by Directorate of Research & Development, JNTUK, Kakinada during 15-30 May, 2013.
- Attended a workshop on "MATLAB and its Applications in communications and signal processing" organized by department of Electronics and Communication Engineering, Andhra university College of Engineering(A), Visakhapatnam on 12-13 Nov., 2011.

### Online Workshops Attended:

- A Five Day FDP named "International FDP on Linux Fundamentals with Cloud and Container Platform" conducted by Marian College, Kuttikanam and IPSR solutions ltd from from 22 -28 July 2020.
- A Five Day Workshop on "Fight Covid-19 using "IoT" via online mode" conducted by Department of Electronics and Communication Engineering in association with Enovate Skill, a unit of Enovation Lab LLP, Chandigarh from 6-10 July 2020.
- A 28 day, 60 contact hours FDP named "Faculty Development Program on AI and Deep Learning" conducted by APSSDC and 360DigiTMG from 1-28 July 2020.
- A Five Day FDP on "Cyber security" conducted by department of CSE and computer society
  of India in association with Supraja Technologies from 28may to 1 june 2020.
- A One Day Webinar on "Analog IC Design" conducted by coreel technologies on 3 June 2020.
- A One Week FDP on "Operations Management: Developing new Perspective in the era of AL/ML" conducted by Meerut institute of technology, Meerut from 30 May-3 June 2020.
- A One week FDP on "Advanced Python for enterprise applications" from 10-15 june 2020 by the directorate of faculty development center, JNTUK Kakinada in association with Rossum computing Pvt. Limited, Hyderabad.
- A One week online FDP on "Applications of optimization techniques to electrical engineering" form 22-06-2020 to 26-06-2020, organized by Department of Electrical and Electronics Engineering, Gayatri Vidya Parishad College of Engineering for Women, Visakhapatnam.
- A Five Day National Workshop on "Applications of Image Processing and Machine Learning" organized by the Departments of Computer Science and Engineering, and Information Technology from 22nd to 26th June 2020.
- A One week national level Faculty Development Programe(FDP) on "Artificial Intelligence" conducted from 25-29 may 2020 organized by Internal quality assurance cell in association with dept. of CSE chalapathi institute of Technology and Brain o Vision solutions india pvt ltd.
- A One Week Online Faculty Development Programe(FDP) pn "Speech Processing Applications and Challenges" organized by dept. of ECE Santhiram Engg. College, Nandyal

in collaboration with iNternational Institute of information Technology, Hyderabad from 20-25 May 2020.

- A One Week Online Faculty Development Programe(FDP) pn "Artificial Intelligence" organized by dept. of CSE Santhiram Engg. College, Nandyal in association with Brain o Vision, Hyderabad from 13-18 May 2020.
- A One Week Online Faculty Development Programe(FDP) pn "Advanced Antenna Design using HFSS" organized by dept. of ECE Santhiram Engg. College, Nandyal in collaboration with Varthaman college of Engineering, Hyderabad, 12-17 May 2020.

#### **Achievements:**

- Received Gold medal from IIT Kharagpur for securing 90% marks(1% Topper) in the NPTEL exam on Analog Communication in Jul-Oct 2018.
- 5% Topper with 82% marks in the NPTEL exam on Discrete Time Signal Processing in Aug-Sep 2018 conducted by IIT Kharagpur.
- Received best paper award from ECE Department, JNTUK for the paper "Improved UKF with time and space averaging of measurements" Presented at VKSPICE-2K18.
- Received certificate of appretiation from GVPCEW for publications in SCI indexed journals during the academic year 2017-2018.
- Received certificate of appretiation from GVPCEW for publications in SCI indexed journals during the academic year 2016-2017.
- Qualified GATE-2007 with an all india rank of 3126.
- Ratified as Assistant Professor by JNTUK in the year 2013.
- Reviewer of SCI Journals named
  - i) "Electronic Letters" published by The institution of engineering and technology(IET).
  - ii) "International Journal of systems Science".
  - iii) "The Journal of Engineering".
  - iv) "The Journal of Aerospace Engineering" published by Sage Publishers.
  - v) "IEEE Aerospace and Electronic Systems"
  - vi) "IEEE Access"
  - vii) "IETE Journal of Research"
  - viii) "IET Radar, Sonar & Navigation"
- Won the World Research Peace Awards 2019 for the work "A Couple of Novel Stochastic Estimators Designed and Tested to Promote the Usage of Towed Arrays on the Regular Basis for Passive Tracking" awarded by RULA AWARDS".(Note:Have not attended and not received it).
- Received :Good teacher memento from GVPCEW in the year 2015.

• Published articles in 6 SCI Indexed journals.

# Personal Profile:

Date of birth : 07 - 10 - 1984

Father's name : D.Narayana Rao

Gender : Male

Marital status : Married

Languages known : English and Telugu

Nationality : Indian.

# Declaration:

I here by declare that all the information mentioned above is true to the best of my knowledge.

Date:21/03/2022

Place: Visakhapatnam [Dr. VENKATA A N RAVI KUMAR DWARAPU]