

## **FACULTY PROFILE**

### **K. RUSHENDRABABU**

Department: Electronics and Communication Engineering

College: Gudlavalleru Engineering College

Mobile: 9032400664

E-Mail: [rushendrababu.k@gmail.com](mailto:rushendrababu.k@gmail.com)



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### **Address for Communication**

#### **College Address:**

K. Rushendrababu  
Assistant Professor,  
ECE Department,  
Gudlavalleru Engineering College,  
Gudlavalleru, Krishna District,  
Andhra Pradesh: 521356

#### **Permanent Address:**

K. Rushendrababu  
s/o K.Durga, H.No: 21-5-4,  
Bhavana Rushi Pet,  
Beside Suresh Mahal,  
Chirala, Prakasam District  
Andhra Pradesh: 523155

### **Academic Qualifications**

<b>S. No</b>	<b>Name of the Degree</b>	<b>University</b>	<b>Percentage of Marks/Grade</b>	<b>Specialization</b>	<b>Year of Pass</b>
<b>1</b>	M.E	Anna University	72	Communication Systems	2009
<b>2</b>	B.E	Anna University	73	E.C.E	2005
<b>3</b>	Intermediate	Board of Higher Education	84.1	M.P.C	2001
<b>4</b>	SSC	Board of Secondary Education	68	-	1999

## Professional Experience

S. No.	Designation	Institution Name	Working Period	
			From	To
1	Assistant Professor	Gudlalleru Engineering College	16-07-2013	Till date
2	Assistant Professor	MLR Institute of Technology	26-11-2012	25-04-2013
3	Assistant Professor	Vishnu Institute of Technology	10-05-2011	08-11-2011
4	Assistant Professor	Eluru College of Engineering & Technology	06-06-2009	16-04-2011

## Professional Body Membership

S. No.	Name of the Professional body	Membership Number
1	Institution of Engineers India	AM159547-7

## Papers Published in Journals No. : 07

- 1) Goriparthi Venkateswara Rao, **K.Rushendra Babu**, Sumit Kumar “Performance comparison of IEEE802.11a Standard in Mobile Environment” International Journal of Scientific & Engineering Research, Volume 5, Issue 10, October-2014; ISSN 2229-5518
- 2) Prudhvi Raj Metti, **K.Rushendra Babu**, Sumit Kumar “Spectrum Handoff Mechanism in Cognitive Radio Networks using Fuzzy Logic” International Journal of Scientific & Engineering Research, Volume 5, Issue 10, October-2014; ISSN 2229-5518.
- 3) P. Vidyullatha, R. Chandra Sekhar, **K. Rushendrababu**, B. Ajay Kumar “Performance Analysis of PARP in STBC MIMO-OFDM System under Different Modulation Schemes”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Volume 5, Issue 1, January 2016, ISSN (Print) 2320-3756 ISSN (Online) 2278-8875
- 4) M. Bhagya Lakshmi, **K. Rushendrababu**, R. Chandra Sekhar, B. Ajay Kumar “Convergence Rate Improvement and Interference Reduction in Smart Antenna System” in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Volume 5, Issue 2, February 2016, ISSN (Print) 2320-3765 ISSN (Online) 2278-8875
- 5) P. Vinay Kumar, **K. Rushendrababu**, K. Rasool Reddy, “ Super Resolution using edge modification through SWT on colour images” in International Journal of Engineering Sciences & Research Technology, Volume 5, Issue 9, September 2016, pp:582-587, ISSN: 2277-9655.

- 6) T. Maheswari, V. Uma Sankar, S. Sai Reddy, B. Pradeep Kumar, K. Rushendrababu, “Design of a microstrip patch antenna for 5G wireless applications” in International Journal of Research and Analytical Review, Volume 6, Issue 1, March 2019, pp:510-515, ISSN: 2349-5138.
- 7) R. Chandrasekhar, **K. Rushendrababu**, “PAPR Reduction in MIMO-OFDM using combination of Non-linear companding with weighting function” International Journal of Recent Technology and Engineering, Volume 7, Issue 5S4, February 2019, pp:393-398, ISSN: 2277-3878.

### **Papers Published in Conferences No. : 01**

- 1) **K.Rushendrababu**, Dr.V.Nagarajan “Hybrid WDM/TDMA PON Optimized for Diversified Application Scenarios” National Conference on Signal Processing, Communications and VLSI design NCSCV'09 on 8<sup>th</sup> & 9<sup>th</sup> May 2009 at Anna University Coimbatore.

### **Workshops Organized No. : 04**

- 1) Acted as co-cordinator for “One Day Workshop on “Ultra Low Power Communication using CC430 Microcontroller – Hands on Experience” held on 07-02-2015 at Gudlavalleru Engineering College, Gudlavalleru.
- 2) Acted as co-cordinator for “One Week FDP on Development of Wireless Sensor Networks using Network Simulator (NS2) – Hands on Experience” during 1<sup>st</sup> to 5<sup>th</sup> December 2015, Gudlavalleru Engineering College, Gudlavalleru.
- 3) Acted as co-cordinator for “One day workshop on Advanced Image Processing Techniques” held on 23<sup>rd</sup> September 2017, Gudlavalleru Engineering College, Gudlavalleru.
- 4) Acted as co-cordinator for “One day workshop on Curriculum Design – Blooms taxonommy” held on 3<sup>rd</sup> January 2018, Gudlavalleru Engineering College, Gudlavalleru.

### **Workshops /Conferences /Seminars Attended No. : 13**

- 1) Attended the two day workshop on “Wireless Sensor Networks” at SSN College of Engineering, Chennai, during 18-19 April 2008.
- 2) Attended a two day workshop on “Soft Computing and Signal Processing Applications to Engineering” at Sasi Institute of Technology and Engineering, Tadepalligudem, during 24<sup>th</sup> to 25<sup>th</sup> June 2011.
- 3) Attended a workshop on “Microcontrollers” at Shri Vishnu Engineering College for Women, Bhimavaram during 20<sup>th</sup>–26<sup>th</sup> August 2011.
- 4) One week refresher course on “Electronic Devices and Circuits” during 23-28 September, 2013 at Gudlavalleru Engineering College.
- 5) Two weeks refresher course on Signals and Systems during 02-12 January, 2014 at Gudlavalleru Engineering College, by IIT Kharagpur.

- 6) Attended a three day national workshop on “Theory & Applications of Intelligent Signal Processing” at Gudlavalleru Engineering College, Gudlavalleru during 28-02-14 to 02-03-14.
- 7) Attended Faculty Summit on Advanced Wireless Communication & Research conducted on December 13<sup>th</sup> and 14<sup>th</sup>, 2013 at IIIT – Hyderabad.
- 8) Attended 3 day workshop on Advances in Antenna Design and applications with HFSS S/W simulations and hands on at Matrusri Engineering College, Hyderabad on 24<sup>th</sup> – 26<sup>th</sup> July’2014.
- 9) Attended a one day workshop on “Speech Processing current challenges and Hands on experience” by Dr. Anil Kumar Vuppala at Gudlavalleru Engineering College on 23<sup>rd</sup> August’ 15.
- 10) Attended a one day workshop on “Ultra Low Power Communication using CC430 microcontroller::Hands on experience” on 7<sup>th</sup> February’2015 in the department.
- 11) Attended a one day workshop on “Research in Energy Management” at Vijayawada, conducted by Institution of Engineers (India) on 29<sup>th</sup> March’2015
- 12) Attended a two day workshop on “Image Processing Applications using MATLAB” at Gudlavalleru Engineering College, during 12-13 October 2015.
- 13) Attended a two day “Cisco Annual Conference 2020” at Bangalore, during 28-29 January 2020.

### **Certifications/Training Programs Attended No. : 15**

- 1) Attended a one week workshop on “Training Teachers for Excellence” at Gudlavalleru Engineering College” Gudlavalleru from 19-08-14 to 21-08-14 and 29-12-14 to 31-12-14.
- 2) Short Term Training Program on “Digital Signal and Image Processing using MATLAB and LabVIEW” from 19.05.2015 to 22.05.2015 at Kongu Engineering College, Erode, Tamil Nadu.
- 3) Attended a Three day FDP on “Bio-Signal Processing & Measurements and Computing Everywhere” at Vignan University, Vadlamudi during 26<sup>th</sup> to 28<sup>th</sup> November 2015.
- 4) Attended a one week FDP on “Development of Wireless Sensor Networks Using Network Simulator (NS2) – Hands on Experience” during 1<sup>st</sup> to 5<sup>th</sup> December 2015 at Gudlavalleru Engineering College, Gudlavalleru.
- 5) Attended in DeitY, MCIT Sponsored FDP on “Wireless Communication Technologies” organized by the E&ICT Academy, NITW at Gayatri Vidya Parishad College of Engineering, Visakhapatnam, from 29<sup>th</sup> August – 3<sup>rd</sup> September 2016.
- 6) Attended a two day staff training program on “ Simulation of Linear & Digital Integrated Circuits and Microcontroller based Applications using NI Multisim” during 4<sup>th</sup> to 5<sup>th</sup> November 2016, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru.
- 7) Attended a one week FDP on “Hands on Experience in Signal Processing Applications” held during 7<sup>th</sup>-12<sup>th</sup> November, 2016 at Gudlavalleru Engineering College, Gudlavalleru.
- 8) Attended a two day FDP on “Research Issues in Cognitive Radio Networks” during 9<sup>th</sup> - 10<sup>th</sup> January 2017 at Gudlavalleru Engineering College, Gudlavalleru.
- 9) Attended a One Week FDP on “Signal and Image Processing using LabVIEW” during 13<sup>th</sup> to 18<sup>th</sup> November 2017 at Gudlavalleru Engineering College, Gudlavalleru.

- 10) Attended a One Week FDP on “Design and Analysis of RF Antennas using HFSS software” during 7<sup>th</sup> -11<sup>th</sup> November 2017 at Sasi Institute of Technology and Engineering, Tadepalligudem.
- 11) Attended a Short term course on “Metamaterials and Applications” during 13<sup>th</sup> -20<sup>th</sup> December 2017 at IIT Kharagpur, Kharagpur.
- 12) Attended a two weeks training program on “CCNA R & S (Module 1 & 2)” during 1<sup>st</sup> – 12<sup>th</sup> May 2018 at SRK Institute of Technology, Vijayawada conducted by Cisco Trident Academy.
- 13) Attended a Short Term Training Programme through ICT Mode on “Evaluating Student’s Performance and Designing Question Papers”, organized by NITTR, Kolkata during 25-02-2019 to 01-03-2019.
- 14) Attended Three Day training programme on “ Advanced Development Tools Based IoT” organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering college, Gudlavalleru from 11-11-2019 to 13-11-2019.
- 15) Attended One week FDP on “” organized by Electronics and Communication Engineering in association with NI, Bangalore at Gudlavalleru Engineering College, during 25-11-2019 to 30-11-2019.

#### **ONLINE:**

##### **Webinars: 03**

- 1) Attended on Online Webinar on “ Outcome Based Education Road-Map to E-Learning & Accreditation”, organized by Informatics, Bangalore on 29-05-2020.
- 2) Attended an Online Webinar on “Radio Frequency Measurements for Cellular and Wireless Communication Systems" organized by Department of Electronics and Communication Engineering on 25th May, 2020.
- 3) Attended on Online Webinar on “Impact of COVID in Engineering Education & Way forward”, organized by ISTE Chapter, Gudlavalleru Engineering College, Gudlavalleru on 09-06-2020.

##### **FDP/Training Programs: 14**

- 1) Attended One week training program on “CCNV7 (Module-3) Remote Instructor Training Program” during 7<sup>th</sup> April – 14<sup>th</sup> April 2020.
- 2) Attended Four Day FDP on “Digital Image Processing using Matlab” during 24<sup>th</sup> April – 27<sup>th</sup> April 2020 hosted by SkilltoHire.
- 3) Attended Two week FDP on “Advanced Digital Image Processing Techniques” during 1<sup>st</sup> May – 14<sup>th</sup> May 2020 hosted by SkilltoHire.
- 4) Attended One week online FDP on “Advanced Antenna Design using HFSS” during 12<sup>th</sup> May – 17<sup>th</sup> May 2020 organized by Santhiram Engineering College, Nandyal.
- 5) Attended Five day National level online FDP on “Modern Research Trends in Communication, Signal Processing and VLSI/MEMS”, organized by Andhra Layola Institute of Engineering and Technology, during 19<sup>th</sup> May – 23<sup>rd</sup> May 2020.
- 6) Attended one week international online knowledge development programme on “ Challenges and advancements in the design of IoT, Embedded an VLSI systems – A Researchers View” during 8<sup>th</sup> June – 13<sup>th</sup> June 2020, organized by Gudlavalleru Engineering College.

- 7) Attended FDP on “Data Science” during 1<sup>st</sup> June – 26<sup>th</sup> June 2020 organized by EXCELR and APSSDC.
- 8) Attended an online Two week FDP on “Embedded Systems” during 13-07-2020 to 25-07-2020, organized by APSSDC, Andhra Pradesh.
- 9) Attended a “Five Day Online Faculty Development Program on Scilab” during 25-06-2020 to 29-06-2020, organized by VKR,VNB & AGK College of Engineering in association with Spoken Tutorials IIT Bombay
- 10) Attended a National Level Online FDP on "Image Processing and Computer Vision-Industrial Scope" organized by the Department of Electronics and Communication Engineering, Malineni Lakshmaiah Women’s Engineering College, Guntur from 8th to 12th July 2020.
- 11) Attended an Online One week Refresher course on “Embedded System Design”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 27-07-2020 to 01-08-2020.
- 12) Attended an Online Five days FDP on “Data Science Applied in Industry” organized by Jawaharlal Nehru Technological University Kakinada (JNTUK) in association with DeepSphere.AI, USA, during 17-08-2020 to 21-08-2020.
- 13) Attended an Online AICTE Sponsored Short Term Training Programme on "Blockchain Architecture Design and Use Cases" (Phase-I), organized by Gudlavalleru Engineering College, during 10th - 15th August, 2020.
- 14) Attended an Online AICTE Sponsored Short Term Training Programme on "Blockchain Architecture Design and Use Cases – Decentralized Network Synchronization" (Phase-II), organized by Gudlavalleru Engineering College, during 17th - 22th August, 2020.

#### **NPTEL Certifications:**

- 1) Introduction to Research - Elite
- 2) Antennas – Elite
- 3) Principles of Signal Estimation for MIMO/OFDM Wireless Communication – Gold

#### **Guest Lectures Delivered No. : 02**

- 1) Delivered a staff seminar on Cognitive Radio Networks in the department for the faculty.
- 2) Delivered a staff seminar on Metamaterials on 18<sup>th</sup> September’15 in the department for the faculty.

#### **Subjects Handled**

##### **Under Graduation**

- Biomedical Engineering
- Basic Electronics/Electronic Devices and Circuits/Elements of Electronics Engineering.
- Electromagnetic Waves and Transmission Lines
- Probability Theory and Stochastic Process
- Digital Communication

- Embedded Real Time Operating System
- NanoTechnology
- Computer Networks

**Labs Handled: (UG)**

- Electronic Devices and Circuits/ Semiconductor Devices and Circuits
- Digital Communications
- Analog Communications
- Pulse and Digital Circuits

**Post Graduation**

- Wireless Communication Networks
- Embedded – C
- Research Methodology

**Labs Handled: (PG)**

- Embedded - C

**Other Responsibilities**

**College Level**

1. Member of the anti ragging committee for the academic year 2014-2015.
2. One of the instructors for CCNA R&S under Cisco Networking Academy (GEC).

**Department Level**

1. Time Table Co-cordinator for the II B.Tech & IV B.Tech ECE (Autonomous) for the AY 2015-2016, 2016-2017, 2017-2018 and 2018-2019 respectively.

**Projects Guided**

**Under Graduation: 06**

S. No.	Name of the project	Year
1	Face Detection Based On Gabor Feature Extraction And Neural Networks	2013
2	Electronic Security Jacket for Women	2014
3	Toxic Gas Detection and Alerting System	2015
4	Brain Tumor Detection by processing MRI Images	2016
5	Noise Reduction of ECG signals through genetic optimized wavelet threshold filtering	2017
6	Comparative Analysis of Filtering Techniques	2018

**Post Graduation: 04**

S.No.	Name of the project	Year
1	Spectrum Handoff Mechanism in Cognitive Radio Networks using Fuzzy Logic	2014
2	Performance comparison of IEEE802.11a Standard in Mobile Environment	2014
3	Convergence rate improvement and interference reduction in smart antenna system	2016
4	Super resolution using edge modification through SWT on color images.	2016

**Guiding Ph. D Students: NIL****Books Published No. : 04**

1. Co-author for chapter 1 titled "Electronic Devices and Circuits Lab" of Electronics and Communication Engineering Laboratory Manual series 2 with ISBN-978-1-4276-5564-6 in the year 2016
2. Co-author for chapter 4 (4.1) titled "Digital Communications Lab" of Electronics and Communication Engineering Laboratory Manual series with ISBN-978-1-4276-5563-9 in the year 2016
3. Co-author for chapter 13 titled "Computer Networks" of Electronics and Communication Engineering Instructional Manual with ISBN-978-1-4276-5539-4 in the year 2015 and  
Co-author for chapter 22 titled "Bio-Medical Engineering" of Electronics and Communication Engineering Instructional Manual with ISBN-978-1-4276-5539-4 in the year 2015
4. Co-author for chapter 2 (2.2) titled "Analog Communications Lab" of Electronics and Communication Engineering Laboratory Manual with ISBN-978-1-4276-5536-3 in the year 2015

**R&D and Consultancy: 03**

S.No.	Project Title	Source of Funding	Duration	Role	Status
1	Design and Realisation of CMOS circuits using PGDST technique to reduce power dissipation	In-House R&D	1 Year	Co-Investigator	Completed
2	Design and Development of Automated Public Transportation System and Traffic Guidance System.	UGC	2 Years	Co-Investigator	Ongoing

**Curriculum Design and Development**

1. Embedded - C
2. Computer Networks



3. Biomedical Engineering
4. Introduction to 4G and 5G
5. Cognitive Radio Networks

**Academic Rewards / Achievements: NIL**

**Extra Curricular Activities**

1. Enacted as BoS member for the Autonomous curriculum designing of Electronics and Communication Engineering at Gudlavalleru Engineering College, Gudlavalleru on 2<sup>nd</sup> August 2014 and 25<sup>th</sup> May 2015.

**Declaration**

I hereby declare that all the above-furnished information is correct to the best of my knowledge.

Date: 24-08-2020

Place: Gudlavalleru

Signature

(K. Rushendrababu)