Name: **Dr. Santosh Kumar Choudhary**
Designation: Assistant Professor
Department: Electronics and Communication Engineering
Mail ID: santoshkumar_ch@vnrvjiet.in

Experience (in years): 14   Teaching: 10   Research: 04   Other (if any, specify): NA

1. Educational / Technical qualifications:

S. No	Level (UG / PG / Ph. D)	Year of passing	Specialization
1	AMIETE (B. Tech)	2009	Electronics and Telecommunication Engineering
2	Ph. D IIT (ISM) Dhanbad	2014	Thin Film Solar Cell

2. Teaching and Learning:

2.1. Teaching Interests: Electronics Measurements and Instrumentation, Electronics Devices and Circuits, Pulse and Digital Circuits, Analog Communications, Digital ommunications, Control System, Cellular and Mobile Communications, Operating System.

2.2. Novel Teaching & Learning Techniques adopted: POGIL, Teaching through exercise, WIT & WIL.

2.3. Involvement in curriculum updating / Design: NA

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Interest in teaching

3.2. CCA/ECA Organized: NA

3.3. CCA/ECA participated: Yes

3.4. Counseling and Mentoring Activity: Yes

3.5. Committees involved in:
   Department level: Training and Placement Cell
   Institute Level: Admission cell

3 Conference / Workshop / Seminar / Guest Lectures:

4.1. Conducted: NA

4.2. Attended: 21

i. Attended one-week Faculty Development Program on "Applications of Computer Vision using Deep Learning" Organized by ECE Department, Seshadri Rao Gudlavalleru Engineering College (SRGEC) Gudlavalleru from 20th to 25th February 2023.

ii. Attended one-week Faculty Development Program on " Recent Trends in Cognitive Science & its applications" Organized by CSE Department, VNRVJIET, Hyderabad from 13th to 18th March 2023.

iii. Attended AICTE Training and Learning (ATAL) academy Faculty Development Programme on "Nanodevices and Advanced Nanomaterials" Organized by Sikkim Manipal Institute of Technology, from 6-10 Dec, 2021.

iv. Attended IEEE SPS Summer School on "Internet of Things for biomedical and healthcare applications" Organized by IEEE VNRVJIET student branch in association with IEEE signal processing society, IEEE Hyderabad sectionand IEEE WIE AG Hyderabad Section, from 28-31 Dec, 2020.

v. Attended One-week workshop on "Cyber Hygiene Using Virtual Lab" Organized by BSF Labs limited and IUCEE Foundation, from 27-31 Oct 2020.

vi. Attended Two-week International Faculty Development Programme on "Latest Technological Developments in Electronics and Communication Engineering" Organized by Department of ECE, KL University, from 5-17 Oct. 2020.

vii. Attended One-week Faculty Development Programme on "Designing Pedagogies for Online Teaching and Learning" Organized by NIT Kurukshetra and engineering college Bikaner, from 23-27 september 2020.

viii. Attended One Week Short Term Training Program on "High performance intelligent real time embedded system design and IoT to accelerate automation system into automation system" Organized by Department of ECE, RKM Engineering college, from 1-7 september 2020.

ix. Attended One-week Faculty Development Programme on "MATLAB and its applications in engineering using Machine Learning and Deep Learning" Organized by Department of ECE, G. Pulla Reddy Engineering College (Autonomous): Kurnool, Andhra Pradesh, India-518007, from 13-17 July 2020.

x. Attended One Week Short Term Training Program on "Data Science & Learning Systems for Engineering Research & Design" jointly Organized by National Institute of Technology, Kurukshetra and Engineering College of Bikaner, Bikaner, from 24-30 June, 2020, under TEQIP-III: Mentoring/Twinning System.

xi. Attended One-week Faculty Development Programme on "AI & DATA Analytics with MATLAB" organized by Department of ECE, NIT Patna under Electronics and ICT Academy, NIT Patna, held from 08th -15th June, 2020 in online mode under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India.

xii. Attended one week FDP on "Cloud Computing and DevOps" organized by Department of CSE, VNRVJIET Hyderabad in collaboration with CSI VNR SC from 23-27 June 2020.

xiii. Attended 5-day FDP on "Artificial Intelligence and Machine Learning for Engineering Application" conducted during June-8-12, 2020, by the Department of CSE, IT and ECE at VNRVJIET, Hyderabad.

xiv. Attended One Week Course on "Modeling & Simulation of Optoelectronic Devices and Solar Photovoltaics (MSODSP-2016)", organized by the Department of Electronics Engineering, at Indian Institute of Technology (ISM) Dhanbad, India from 29th Aug to 02nd Sep 2016.

xv. Attended Three days Course on "Advanced Device Modeling & VLSI Technology (ADMVT-2016)", organized by the Department of Electronics Engineering, at Indian School of Mines Dhanbad, India from 26th May to 28th May 2016.

xvi. Intl. Conf. Microwave and Photonics (ICMAP-13) (IEEE Explored), ISM, Dhanbad, India, Dec 13-15, 2013.

xvii. Intl. Conf. Photonics Global Conference (PGC)-12, Singapore, Dec. 13-16, (IEEE Explored), 2012.

xviii. Attended Intl. Symp. Macro-and Supramolecular Architectures and Materials (MAM)-12, Tamilnadu, India, 2012.

xix. Attended Natl. Conf. FECIT-2011, ISM, Dhanbad, India, SNT-3, Nov. 3-4, 2011.

xx. Attended Summer School on "Photonics-Systems, Modeling Approach and Research Trends (PhotoSMART)" organized by Institute of Radio Physics and Electronics, University of Calcutta in association with A UGC Networking Resource centre in Physical Sciences and IEEE Photonics Society Chapter Kolkata, from 1st June to 18th June, 2010.

xxi. Attended Workshop on "Photonics Devices and Systems for Mid and Long Wavelength Infrared Applications", Organized jointly by the University of Sheffield, UK and the University of Calcutta India, at Institute of Radio Physics and Electronics, Kolkata on 13th Dec 2009.

5.Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: NA

5.2. Articles/Chapters published in Books: CdS/ZnSe-Based Multicolor Quantum Well Infrared Photodetector for Infrared Applications (Springer)

5.3. Books published as single author or as editor: NA

5.4. Projects Guided:
        a) UG: 19
        b) PG: 02

5.5. Research Interests: Thin film solar cell

5.6. Ph. D students:
        a) Enrolled: 00
        b) Submitted: 00
        c) Awarded: 00

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	Ge-content Dependent Efficiency of Si/SiGeHeterojunction Solar cell	International Journal of Materials Science & Processing, Applied Physics A, (Springer), Vol. 112, Issue.3, pp. 543-548	0947-8396	1.444	International
2	A comparative analysis of the short-channel effects of double-gate, tri-gate and gate-all-around MOSFETs	International Journal of nanoparticles Vol. 12, Nos. 1/2, 2020, pp. 112-121	1753-2515		International
3	Investigating inter-subband photocurrent in CdS/ZnSe quantum well photodetector for infrared applications	Microsystem Technologies (Micro- and Nanosystems Information Storage and Processing Systems), Springer	0946-7076	1.513	International
4	Semi Blind Channel Estimation with BCJR Algorithm in OFDM Systems	PENSEE International Journal, vol. 50, Issue 12, pp. 1706-1709			International
5	Detection of Credit Card Fraud using Machine Learning	Journal of Biological Engineering	2349-3232		International

		Research and Review, Vol. 8, Issue 2, pp. 2349-3232			
6	Mitigating the Challenges of Online Learning and Conduct of Examinations - From Faculty Perspective to Student Satisfaction	Journal of Engineering Education Transformations, Vol. No. 35, Issue: Special Issue, pp. 142-152	2394-1707		International

5.8. Papers presented at National / International Conferences:

S. No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1.	Segmentation of Brain MRI Images using Deep Learning	International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems	International	28–30 December 2022
2.	Detection of credit card fraud using machine learning	International Conference on Artificial Intelligence: Theory and Applications (AITA 2021)	International	23rd – 24th December 2021
3.	Rice Disease Detection and Classification Using Artificial Intelligence	1st International Conference on Innovations in Signal Processing and Embedded systems (ICISPES-2021)	International	22– 23 Oct 2021
4.	Optimal Bayesian Estimation Framework for Reduction of Speckle Noise from Breast Ultrasound Images	(ICICPS 2020), HMR Institute of Technology and Management, New Delhi,	International	22-23 Oct. 2020.

				2020.
5.	Asymmetric AlGaAs/GaAs/InGaAs Based Quantum Well Long Wavelength Infrared Photodetector	4th International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), Kolkata, India, 2020.	International	2-4 Oct. 2020.
6.	Inter-subband Photoresponse Analysis of CdS/ZnSe QWIP	6th International Conference on Opto-Electronics and Applied Optics (OPTRONIX-2020)	International	June 08-10 June, 2020.
7.	Surface and Optical Characterization of TiO_2 Thin Films Deposited by RF Sputtering	2nd International Conference on Nano Science &Enginnering Applications - 2018, JNTUH, India	International	4-6, Oct 2018
8.	Impact of Primary Users Duty Cycle on Optimum Secondary Users in Cognitive Radio Systems	2018 9th International Conference on Computing, Communication and Networking Technologies (ICCCNT)	International	10-12 July 2018
9.	Impact of Device Parameters on the Thresold Voltage of Double-Gate Tri-Gate and Gate-All- Around MOSFETs	2018 IEEE Electron Device Kolkata Conference	International	25 Nov 2018
10.	On the Temperature Dependent Efficiency of SiGe/Si Heterojunction Solar Cell	Microwave and Photonics (ICMAP-13), ISM, Dhanbad, India	International	Dec. 13-15, 2013
11.	Performance Analysis of Si/SiGe Double Junction Solar Cell	Microwave and Photonics (ICMAP-13), ISM, Dhanbad, India	International	Dec.13-15, 2013
12.	Ge-content Dependent Efficiency of	Photonics Global	International	Dec. 13-

		Conference (PGC)-12, Singapore		16, 2012
	Si/SiGe Heterojunction Solar cell			
13.	Effect of Carrier Trapping on the Efficiency of Si/SiGe Heterojunction Solar cell	Macro-and Supramolecular Architectures and Materials (MAM)-12, Coimbatore, India	International	Nov. 21-25, 2012
14.	On the Ge-content Dependent Efficiency of Si/SiGe Heterojunction Solar Cell	FECIT-2011, ISM, Dhanbad, India	National	Nov. 3-4, 2011

5.9. Sponsored research Projects:

S. No	Title	Agency	Period	Grant amount	Ongoing / Completed
	NA	NA	NA	NA	NA

5.10 Consultancy Projects:

S. No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
	NA	NA	NA	NA	NA

6.Awards / Honors received: Best Poster Presentation in IEEE Intl. Conference of Microwave and Photonics (ICMAP-13), ISM, Dhanbad, India.

7. Motto: Honesty, Integrity and Hardwork.