

RESUME

Name: Dr.Kiran Kumar Patro

Department: ECE

Designation: Assistant Professor

Employee ID: A5ECE00T72

Date of Birth: 19.08.1989

Father Name : P.S.N Patro

Mother Name : P.Anasuya Devi

Reservation Category (if any) : B.C.-A (OBC)

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Date of Joining in the Institution: 04-06-2018

Academic Excellence:

QUALIFICATION	BOARD / UNIVERSITY	DIVISION	YEAR
Ph.D (UGC JRF/SRF)	AU, Visakhapatnam.	Awarded	2018
M. E (EI-ECE Dept.) (GATE-EC-2011)	AU, Visakhapatnam.	First class with distinction	2013
B. Tech (ECE)	AITAM, JNTU-K.	First class with distinction	2010

Total Years of Experience: 6 Years

Period		Organization/Institution	Designation
04-06-2018	Till Date	AITAM, Tekkali	Assistant Professor
10-03-2016	31-05-2018	Andhra University	Junior Research Fellow (UGC-SRF)
10-03-2014	09-03-2016	Andhra University	Senior Research Fellow (UGC-JRF)



Areas of Interest:

1. Signal Processing with Biological data
2. Optimization Algorithms
3. Machine Learning (Pattern Recognition)

Guidance of Academic Projects:

- i) Doctoral Projects : Nil
- ii) Masters Projects : Nil
- iii) Bachelor Projects : 03

Details of Publications:

1. Kiran Kumar Patro and P.Rajesh Kumar, "De-Noising of ECG raw Signal by Cascaded Window based Digital filters Configuration," *IEEE Power, Communication and Information Technology Conference*, pp.120-124, 2015. **(IEEE Xplore)**
2. Kiran Kumar Patro and P.Rajesh Kumar, "A Novel Frequency-Time based approach for the detection of Characteristic Waves in Electrocardiogram signal," *Springer LNEE series*, vol.32, pp.57-67, 2015. **(SCOPUS)**
3. Kiran Kumar Patro and P.Rajesh Kumar, "An Efficient Signal Processing Algorithm for accurate detection of Characteristic points in Abnormal ECG signals," *IEEE International Conference on Electrical, Electronics and Optimization Techniques*, pp.1476-1479, 2016. **(IEEE Xplore)**
4. Kiran Kumar Patro and P.Rajesh Kumar, "Effective Feature Extraction of ECG for Biometric Application," *Journal of Elsevier Procedia*, vol.115, pp.296-306, 2017. **(SCOPUS Indexed)**
5. Kiran Kumar Patro and P.Rajesh Kumar, "Machine Learning Classification Approaches for Biometric Authentication system using ECG signals," *Journal of Engineering Science and Technology Review*, vol.10, no.6, pp.01-08, 2017. **(SCOPUS Indexed)**
6. Kiran Kumar Patro and P.Rajesh Kumar, "Optimized ECG Feature Selection with Mutual Information for Biometric Identification System using Genetic Algorithm,"

BRIS Journal of Advances in Science and Technology under Magnet Research Report, vol.5, no.1, pp.222-231, 2018. **(ISI Thomson Reuters)**

7. Kiran Kumar Patro *et al.*, "Swarm based Intelligent Feature Optimization Technique for ECG based Biometric Human Recognition," *International Journal of Engineering and Advanced Technology*, vol.8, no.5S3, pp.172-178, 2019. **(SCOPUS Indexed)**
8. Kiran Kumar Patro *et al.*, "ECG data Optimization for biometric human recognition using statistical distributed machine learning algorithm," *Journal of Super Computing*, Springer, vol. 76, no.2, pp.858-875. <https://doi.org/10.1007/s11227-019-03022-1>, 2019. **(SCI/SCIE Indexed)**.
9. Kiran Kumar Patro *et al.*, "An efficient optimized feature selection with machine learning approach for ECG biometric recognition," *IETE Journal of Research*, Taylor & Francis. <https://doi.org/10.1080/03772063.2020.1725663>. **(SCI/SCIE Indexed)**
10. Kiran Kumar Patro *et al.*, "Noise removal in long term ECG signals using EMD based threshold method," Scopus indexed International Conference on Data Engineering and Communication Technology (ICDECT) 2020. Lecture Notes in Data Engineering and Communication Technologies, Springer, vol.63, pp.461-469 **(SCOPUS)**

Details of Patents:

1. Published a patent titled "ANT-Vehicle Speeding detection: Automatic vehicle speeding detection, Notification and Tracking system". Application No. 202041051000A, Published on 04/12/2020.
2. Published a patent titled "Breather Bag controlling system and method for maintaining pressure in controlled Atmosphere". Application No. 202041052715A, Published on 11/12/2020.

Details of Conferences / Workshops / Refresher Courses Attended:

S. No.	Dates	Name of The Programme	Host Institution
1	20 th -21 st July-2015	International workshop on Electromagnetic Interference and Compatibility	AU with IEEE EMC Society
2	26 th Feb-2015	Seminar on MATLAB & Simulink for Engineering Education	Math Works India
3	19 th -21 st Oct-2016	National Workshop on Advanced Antenna Design (NWAAD-2K16)	Dept. of ECE AU
4	5 th -9 th Dec-2016	one week foundation course on MATLAB and LATEX	Dept. of EEE AU
5	30 th -31 st	National Workshop on Graphical System	Dept. of ECE

	Mar-2017	Design using LabVIEW	AU
6	Jul-Oct 2018	NPTEL-AICTE approved Faculty Development Programme on Switching Circuits and Logic Design	IIT Kharagpur
7	17 th -21 st Dec-2018	Five day short term course on Machine Learning Techniques for Signal and Image processing applications	NIT Rourkela
8	Aug-Oct 2019	NPTEL-AICTE approved Faculty Development Programme on Accreditation and Outcome based Learning	IIT Kharagpur
9	16 th -17 th May 2020	Workshop on VLSI CIRCUITS ANALOG & DIGITAL DESIGN PERSPECTIVES	JNTU Anantapuramu
10	19 th -23 rd June 2020	National Level Five Day Faculty Development Programme (FDP) on RE-THINK AND RE-DESIGN OF CURRICULUM, TEACHING METHODS AND MODE OF TEACHING IN POST COVID SCENARIO	Acharya Nagarjuna University, Guntur
11	22 nd -26 th June 2020	One week Faculty Development Programme (FDP) on TECHNOLOGICAL ADVANCES IN WIRELESS COMMUNICATION SYSTEMS	AITAM, TEKKALI
12	June 2020	Webinar on SCOPE OF EMBEDDED SYSTEMS	JNTU Kakinda, Vizianagaram Campus
13	13 th -17 th July 2020	One week STC on Antenna Design Techniques and Software Simulations using HFSS	NITTTR Chandigarh
14	29 th July	One day Workshop on Simulation of smart home using CISCO packet tracker	IEEE & IIIT Kottayam
15	27 th July-01 Aug 2020	AICTE SPONSORED STTP-1 on Antenna Design and Analysis using Mathematical Solvers	AICTE & AITAM
16	7 th -12 th September 2020	AICTE SPONSORED STTP-2 on Antenna Design and Analysis using Mathematical Solvers	AICTE & AITAM
17	29 th OCT-03 rd NOV 2020	AICTE SPONSORED STTP-3 on Antenna Design and Analysis using Mathematical Solvers	AICTE & AITAM
18	2 nd -7 th November 2020	AICTE SPONSORED STTP ON MACHINE LEARNING AND ITS APPLICATIONS	AICTE & LENDI Institute of Technology

Other Achievements:

1. Qualified **UGC-NET JRF** and **ASSISTANT PROFESSOR** on June-2012.
2. Qualified **GATE-Five times** in Electronics and Communication Engineering (**GATE EC 2011/2012/2013/2016/2017**)
3. Won the consolation prize in a “**HARDWARE PROJECT EXHIBITION**” at S.R.K.R Engineering College, Bhimavaram.
4. Organized three workshops named INCEMIC-2015, NWAAD-2K16, and NWLabVIEW-2K17 in the Department of Electronics and Communication Engineering, Andhra University, Visakhapatnam.
5. Topper of 5% in NPTEL Online Certification course “Switching circuits and Logic Design”, by IIT Kharagpur, Jul-Oct 2018.
6. Topper of 5% in NPTEL Online Certification course “Principles of Signals and Systems”, by IIT Kharagpur, Jan-Apr 2019.
7. Active peer reviewer to the reputed **SCI/SCIE** journals **IEEE Access**, International Journal of Computational Intelligence and International Journal of Communication Systems.
8. Total citations: **Scopus-63, WoS-27, h-index-2. Verified reviews-10**

Certifications (Webinars/ Technical Quiz/ Coursera) :

1. Participated a webinar on OUTCOME-BASED EDUCATION (OBE) organized by Department of Electronics and Communication Engineering, in association with IEEE, Audisankara College of Engineering and Technology, Gudur, Andhra Pradesh.
2. Attended a webinar on MEMS SENSOR organized by Department of Electronics and Communication Engineering, in association with IEEE, Audisankara College of Engineering and Technology, Gudur, Andhra Pradesh.
3. Participated a webinar on INTERNET OF THINGS AND TRUSTED PLATFORM MODULE organized by Department of Electronics and Communication Engineering, in association with IEEE, IETE and ISTE Meenakshi Sundararajan Engineering College, Chennai.
4. Attended a webinar on LOSSLESS MEDICAL IMAGE COMPRESSION organized by Department of Electronics and Communication Engineering, in association with IEEE, Audisankara College of Engineering and Technology, Gudur, Andhra Pradesh.
5. Participated a webinar on GETTING STARTED WITH DOCKER AND AMAZON WEB SERVICES HANDS ON TRAINING organized by Department of Electronics and Communication Engineering, Pallavi Engineering College, Nagole, Hyderabad.
6. Participated a webinar on INDUSTRY 4.0- TRANSFORMING INDUSTRIES AND DIGITAL REVOLUTION organized by Department of Electronics and

- Communication Engineering, Nalla Narasimha Reddy Group of Institutions, Hyderabad.
7. Attended a webinar on Yoga Therapy: A Panacea for physical and mental health issues, organized by School of management studies (MBA), Sreenidhi Institute of Science and Technology, Hyderabad.
 8. Participated national level quiz competition on RADAR SYSTEMS with a score of 100% conducted by department of Electronics and Communication engineering, AM Reddy College of Engineering & Technology.
 9. Participated national level quiz competition on RESEARCH METRICS IN SCIENTIFIC PUBLICATIONS with a score of 100% conducted by department of Electronics and Communication engineering, MLR Institute of Technology.
 10. Participated national level quiz competition on ARTIFICIAL INTELLEGENCE with a score of 92% conducted by department of Electronics and Communication engineering, MOHMED SATHAK Engineering College.
 11. Participated national level quiz competition on ANALOG COMMUNICATION with a score of 75% conducted by department of Electronics and Communication engineering, PSCMRCET in association with IETE and Institution's Innovation council (MHRD).
 12. Participated national level quiz competition on DIGITAL COMMUNICATION with a score of 90% conducted by department of Electronics and Communication engineering, PSCMRCET in association with IETE and Institution's Innovation council (MHRD).
 13. Participated national level quiz competition on SATELLITE COMMUNICATION with a score of 95% conducted by department of Electronics and Communication engineering, PSCMRCET in association with IETE and Institution's Innovation council (MHRD).
 14. Participated national level quiz competition on DIGITAL IMAGE PROCESSING with a score of 100% organized by department of Electronics and Communication engineering, G.Pulla Reddy Engineering College (Autonomous), Kurnool.
 15. Participated national level quiz competition on COMPUTER BASICS with a score of 83% organized by department of Computer Science and engineering, NRI Institute of Technology (Autonomous), Krishna (dist.), Andhra Pradesh.
 16. Participated national level quiz competition on ANALOG CIRCUITS with a score of 80% organized by department of Electronics and Communication Engineering, Malla Reddy College of Engineering & Technology (Autonomous), Secunderabad, Telengana.
 17. Participated national level technical quiz competition on DIGITAL CIRCUITS with a score of 80% organized by department of Electronics and Communication Engineering, Anurag Engineering College (Autonomous), Suryapet, Telengana.
 18. AI For Everyone – 4 Week Study - authorized by deeplearning.ai and offered through Coursera, April 14, 2020.

19. Building ROBOTS and other devices on Arduino: from a traffic light to a 3D printer- 6 week study and offered through Coursera.
20. On premises installation and Fundamentals with Google cloud's Apigee API Platform offered through Coursera.
21. Pressure, Force, Motion and humidity sensors- 4 week study offered through coursera.
22. Successfully completed a course on Wireless communications for everybody- 6 weeks study offered through Coursera.
23. Successfully completed a course on Getting started with AWS Machine Learning- 5 weeks study offered through Coursera.
24. On premises Management, Security, and upgrade with Google cloud's Apigee API Platform offered through Coursera.
25. Successfully completed a course on AWS Fundamentals: Going Cloud Native- 5 week study offered through coursera.
26. Successfully completed a course on Introduction to Satellite Communications- 6 week study offered through coursera.

Declaration

I hereby declare that all the above details furnished by me, are correct to the best of my knowledge and I feel responsible for any discrepancies found.

(Dr. Kiran Kumar Patro)