

# RAJESH KUMAR DUBEY

Associate Professor

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**Specialization:** Digital Signal Processing/Speech Signal Processing/Machine Learning/Control System Engg.

## **Professional Qualifications:**

Course/Degree	Specialization	Board/University	Year of Passing
Ph. D.	<b>Digital Signal &amp; Speech Processing</b> (Electronics Engg.) [Centre for Applied Research in Electronics]	IIT Delhi	March 2014
M. Tech.	<b>Control Engg. &amp; Instrumentation</b> [Department of Electrical Engg.]	IIT Delhi	Dec. 2002
B. Tech.	Electrical Engg.	NIT Hamirpur (HP)	June 1999

## **Teaching & Research Experience:**

- 1. Associate Professor** from 21<sup>st</sup> August 2018 to till date in the Department of Electrical Engineering under School of Engineering & Technology, Central University of Haryana, Mahendergarh.
- 2. Professor** from 12<sup>th</sup> Jun. 2018 to 20<sup>th</sup> August 2018 in Electronics & Communication Engineering Department, Galgotias University, Plot No. 2, Sector-17A, Yamuna Expressway, Greater Noida (UP).
- 3. Assistant Professor** from 18<sup>th</sup> Feb. 2006 to 11<sup>th</sup> Jun. 2018 in Electronics & Communication Engineering Department, Jaypee Institute of Information Technology (Deemed-to-be University), A-10, Sector-62, Noida (UP).

4. **Sr. Lecturer** from 01<sup>st</sup> July 2005 to 17<sup>th</sup> Feb. 2006 in Electronics & Communication Engineering Department, HMR Institute of Technology and Management, Hamidpur, Delhi.
5. **Lecturer** from 06<sup>th</sup> Jan. 2003 to 27<sup>th</sup> Sept. 2004 in Electronics & Communication Engineering Department, AMITY School of Engineering & Technology, Bijwasan, Delhi.

### **Industrial Experience:**

1. **Assistant Engineer (Electrical)** from 28<sup>th</sup> Sept. 2004 to 30<sup>th</sup> Jun. 2005 in Uttaranchal Power Corporation Limited (UPCL), Urja Bhawan, Dehradun. The nature of works include:
  - In Accelerated Power Distribution and Reform Programme (APDRP) section for power planning and reporting of electrical energy distribution.
  - Inspection of distribution transformer in Rural Electrification (REC).
  - Inspection of repaired distribution transformer by different agencies.

### **Publications**

#### **International Journals**

1. Mohan Singh and Rajesh K. Dubey, "Non-intrusive speech quality with different time-scale", IOSR Journal of Computer Engineering (IOSR-JCE), **ISSN: 2278-8727**, Vol. 2, Issue 5 (July-Aug. 2012), pp. 49-53. [*Indexed in Google Scholar*] [*Impact Factor 3.712*]
2. Rajesh K. Dubey and Arun Kumar, "Non-intrusive Speech Quality Assessment using Several Combinations of Auditory Features", International Journal of Speech Technology, Springer, **ISSN: 1381-2416**, Vol. 16, Issue 1 (Jan. 2013), pp. 89-101. [*ESCI, Indexed in SCOPUS & UGC Approved*] [*Impact Factor 1.088*]
3. Rajesh K. Dubey and Arun Kumar, "Non-intrusive speech quality estimation using multi-resolution auditory model features", IET Signal Processing, **ISSN: 1751-9675**, Vol. 9, Issue 9 (Dec. 2015), pp. 638-646. [*SCI, SCOPUS Indexed & UGC Approved*] [*Impact Factor 1.325*]
4. Rajesh K. Dubey, "Determination of location of coding regions in Eukaryotic genomes using short-time Fourier transform and discrete wavelet transform", International Journal of Engineering Technology, Management and Applied Sciences, **ISSN:2349-4476**, Vol. 4, Issue 9 (Sept. 2016), pp. 97-101. [*Indexed in Google Scholar*] [*Impact Factor 2.24*]
5. Deeksha Adhikari and Rajesh K. Dubey, "Non-intrusive speech quality assessment algorithms on ITU-T Supplement-23 databases: A review", International Journal of Electronics, Electrical and Computational System, Mc Graw Hill Publication, **ISSN: 2348-117X**, Vol. 5, Issue 12 (Dec. 2016), pp. 18-22. [*Indexed in Google Scholar & UGC Approved*] [*Impact Factor 2.52*]
6. Brijendra Yadav and Rajesh K. Dubey, "Speech enhancement algorithms: A review", International Journal of Electronics, Electrical and Computational System, Mc Graw Hill Publication, **ISSN: 2348-117X**, Vol. 6, Issue 1 (Jan. 2017), pp. 15-20. [*Indexed in Google Scholar & UGC Approved*] [*Impact Factor 2.52*]
7. Rajesh K. Dubey and Arun Kumar, "Effect of number of mixture components of GMM and feature vector dimensions in non-intrusive speech quality evaluation", International Journal of

Management and Applied science, **ISSN: 2394-7926**, Vol. 3, issue-1, special issue-2, (Jan. 2017), pp. 123-127. **[Indexed in Google Scholar] [Impact Factor 1.05]**

8. Rajesh K. Dubey and Arun Kumar, "Non-intrusive speech quality estimation as combination of estimates using multiple time-scale auditory features", Digital Signal Processing Journal – Elsevier, **ISSN: 1051-2004**, Vol. 70, (Nov. 2017), pp. 114-124, **[SCI, SCOPUS Indexed & UGC Approved] [Impact Factor 2.337]**.
9. Rajesh K. Dubey and Arun Kumar, "Multiple time-instances features of degraded speech for single ended quality measurement", Advances in Electrical and Electronic Engineering Journal, **ISSN: 1336-1376**, Vol. 15, No. 3 (Sept. 2017), pp. 400-407, **(ESCI, Indexed in SCOPUS & UGC Approved), [Impact Factor 0.669]**.
10. Rajesh K. Dubey, Himanshu Sharma, and Vikas Singh, "Speaker Recognition System by Clustering of MFCC Features using VQ and LBG Algorithm", International Journal of Electronics, Electrical and Computational System, Mc Graw Hill Publication, **ISSN: 2348-117X**, Vol. 6, Issue 12 (Dec. 2017), pp. 146-150. **[Indexed in Google Scholar & UGC Approved] [Impact Factor 2.52]**.
11. Rajesh K. Dubey and Arun Kumar, "Single-ended Speech Quality Measurement using Linear Combination of the Quality Score Estimates of Multi-instances Features", Recent Advances in Electrical and Electronic Engineering Journal, **ISSN: 2352-0965**, Jan. 2019. **(Indexed in SCOPUS & UGC Approved)**.

#### **International Conferences**

1. Rajesh K. Dubey and Arun Kumar, "Non-intrusive objective speech quality evaluation using features at multiple time-scales", in Proceeding of International Conference, Acoustics 2013 New Delhi, the Acoustical Society of India (ASI) and the **French Acoustical Society (SFA)** under the aegis of the CSIR-National Physical Laboratory, New Delhi, India (Nov. 2013), pp. 1040-1046, **ISSN:0973-3302**.
2. Rajesh K. Dubey and Arun Kumar, "Non-intrusive objective speech quality assessment using a combination of MFCC, PLP and LSF features", in Proceeding of 2013 International Conference on Signal Processing and Communication (Technically sponsored by IEEE Delhi section), Jaypee Institute of Information Technology, NOIDA, India (Dec. 2013), pp. 297-302, **ISBN: 978-1-4799-1607-8 [Indexed in SCOPUS]**
3. Rajesh K. Dubey and Arun Kumar, "Comparison of subjective and objective speech quality assessment for different degradations/noise conditions", in Proceeding of 2015 International Conference on Signal Processing and Communication (Technically sponsored by IEEE Delhi section), Jaypee Institute of Information Technology, NOIDA, India (March 2015), pp. 261-266, **ISBN: 978-1-4799-6761-2. [Indexed in SCOPUS]**
4. Nidhi Parmar and Rajesh K. Dubey, "Comparison of performance of the features of speech signal for non-intrusive speech quality assessment", in Proceeding of 2015 International Conference on Signal Processing and Communication (Technically sponsored by IEEE Delhi section), Jaypee Institute of Information Technology, NOIDA, India (March 2015), pp. 243-248, **ISBN: 978-1-4799-6761-2. [Indexed in SCOPUS]**

5. Shweta Singhal and Rajesh K. Dubey, "Automatic speech recognition for connected words using DTW/HMM for English/Hindi languages", in Proceeding of International Conference on Communication Control & Intelligent Systems (Technically sponsored by IEEE UP section), GLA University, Mathura, India (Nov. 2015), pp. 199-203, **ISBN: 978-1-4673-7541-2. [Indexed in SCOPUS].**
6. Rajesh K. Dubey and Arun Kumar, "Lyon's auditory features and MRAM features comparison for non-intrusive speech quality assessment in narrowband speech", in Proceeding of 3<sup>rd</sup> International Conference on Signal Processing & Integrated Networks (SPIN), (Technically sponsored by IEEE UP section), AMITY University, NOIDA, India (Feb. 2016), pp. 28-33, **ISBN: 978-1-4673-9197-9. [Indexed in SCOPUS].**
7. Rajesh K. Dubey and Arun Kumar, "Non-intrusive objective speech quality evaluation using multiple time-scale estimates of multi-resolution auditory model (MRAM) features", international conference CIPECH-16 (Technically sponsored by IEEE UP section), Krishna Institute of Engineering & Technology, Ghaziabad, India (Nov. 2016), pp. 249-253, **ISBN: 978-1-4673-9080-4. [Indexed in SCOPUS].**
8. Rajeev Ranjan and Rajesh K. Dubey, "Isolated word recognition using HMM for Maithili dialect", 2016 International Conference on Signal Processing and Communication (Technically sponsored by IEEE UP section), Jaypee Institute of Information Technology, NOIDA, India (Dec. 2016), pp. 323-327, **ISBN: 978-1-5090-2684-5. [Indexed in SCOPUS].**
9. Rajesh K. Dubey and Arun Kumar, "Multiple time-scale estimates of Lyon's auditory features for non-intrusive speech quality assessment", 2016 International Conference on Signal Processing and Communication (Technically sponsored by IEEE UP section), Jaypee Institute of Information Technology, NOIDA, India (Dec. 2016), pp. 328-333, **ISBN: 978-1-5090-2684-5. [Indexed in SCOPUS].**
10. Kumar Shashi Kant, Rajesh Kumar Dubey, Gitika Sinha, "Performance of auditory features using MFCC and Teager-Kaiser energy computation for non-intrusive speech quality assessment", 4th International Conference on Signal Processing and Integrated Networks (SPIN), (Technically sponsored by IEEE UP section), AMITY University, NOIDA, India (Feb. 2017), pp. 23-26, **ISBN: 978-1-5090-2797-2. [Indexed in SCOPUS].**
11. Vaibhav Thakur, Rajesh K. Dubey, and Nikhil Chauhan, "Text to Speech Synthesizer using Concatenative Synthesis", International Conference on Signal Processing and Communication (Springer), Jaypee Institute of Information Technology, NOIDA, India (March, 2018) **(Presented).**

#### **Reviewer/ TPC committee/Editorial Board**

1. Member of Editorial Board of Journal of Signal Processing and Wireless Technologies.
2. Reviewer of Advances in Electrical and Electronic Engineering journal.
3. Reviewer of IEEE Transactions on Audio, Speech and Language Processing.
4. Reviewer of IEEE Transactions on Multimedia.
5. Reviewer of International Conference on Data Communication and Networks (Co located with GUCON 2018), Springer, organized by Galgotias University, India.

6. Reviewer and member of organizing committee/TPC of 4<sup>th</sup> International Conference on Chip, Circuitry, Current, Coding, Combustion, & Composites 2017 (I7C-17) at Sri SaiRam College of Engineering, Bengaluru.
7. Reviewer of Fourth International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT- 2017).
8. Reviewer and member of organizing committee/TPC of 2016 International Conference on Signal Processing and Communication (Technically cosponsored by IEEE UP section) at IIIT Noida.
9. Reviewer and member of organizing committee/TPC of 2015 International Conference on Signal Processing and Communication (Technically cosponsored by IEEE UP section) at IIIT Noida.
10. Reviewer and member of organizing committee/TPC of 2013 International Conference on Signal Processing and Communication (Technically cosponsored by IEEE Delhi section) at IIIT Noida.

### **Awards and Scholarships:**

1. Excellent research paper award in International Conference on Electrical & Electronics Engineering, New Delhi, organised by IRF/WRFER held on 6<sup>th</sup> Nov. 2016.
2. Scholarship holder during B. Tech at NIT Hamirpur (HP).
3. Scholarship throughout M. Tech. from MHRD at IIT Delhi.

### **Qualified:**

- GATE with 97.92 percentile and achieved an All Indian Rank (AIR) 117 in GATE-2001.
- GATE with 94.92 percentile and achieved an All Indian Rank (AIR) 256 in GATE-1999.
- UPSC-Engineering Services Examination and achieved an All Indian Rank (AIR) 13 in 2004.