

Name:

Dr Mrs Minakshi Pradeep Atre

**Designation:**

Assistant Professor

Contact Details:

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Phone Number with extension: 020 24228258 / 65 / 79 Extn : 452

Educational Qualifications:

- PhD (Electronics: Signal Processing), 2019
- M.E. (E&TC), Pune University, Pune, May 2011.
- B.E. (Electronics), Shivaji University, Sangli, 1999
- *NVidia Certified Deep Learning University Brand Ambassador*

Experience:

- Teaching: 21 Years

Research Interests:

- Signal Processing, Machine Learning, Deep Learning, Artificial Intelligence

Research Projects:

- Emotion Detection in songs, Mathematical Modeling of Impulse Response

Patents: (Details)

- Patent published on "Acoustic Guitar Modeling using Impulse Response of single fret" on 2nd Nov 2018, Patent No: 201821038431

Field of Consultancy (Aspiring):

Signal Processing, Machine Learning and Deep Learning

Number of Publications:

International Journal: 10

National Journal: 01

International Conference: 02

National Conference: 02

Recognition/ Awards:

- Bharat Vikas Award
- IOSRD Best Researcher Award
- DSP Journal of Elsevier Reviewer Recognition

Professional Society Memberships:

- LMISTE
- IEEE
- ISDE

Number of FDPs / STTPs organized: 03 (Linux, Scilab and ILTS)

Number of Workshops organized: 03 (AR/VR Technology) (NVidia)

Number of Conferences / Seminars organized: 01 (NCW-2021)

Number of FDPs / STTPs attended: 25+

Number of Workshops attended: 15+

Number of Conferences / Seminars attended: 15+

Number of Online Certification Courses done: 15

Number of Webinar attended: 10+

Number of times served as a Resource Person: 10

Number of times served as a Reviewer / Judge: 15+

Details of Research papers published:

- "Incident Classification, Prediction of Location and Casualties", by Tanmay Deshpande, Sarun Varghese, Pratik Kale, Dr Minakshi P. Atre, 8th International Conference on Computing for Sustainable Global Development (INDIAcom-2021), Publisher, IEEE, March 2021, <https://ieeexplore.ieee.org/xpl/conhome/9441026/proceeding>
- "Generalized Modeling of Body Response of Acoustic Guitar for All Frets using a Response for Single Fret", Minakshi Pradeep Atre, Dr Shaila D Apte, Applied Acoustics, Elsevier, 145C, 2019, Pages: 439-444

- “Estimating Body Response of Acoustic Guitar Notes using Adaptive Cepstral Domain Windowing”, Minakshi Pradeep Atre, Dr Shaila D Apte, Indian Journal of Science and Technology, Vol 11, Issue 31 August 2018
- “Comparison of Impulse Response Methods for Guitar Modeling”, Minakshi Pradeep Atre, Dr Shaila D Apte, in International Journal of Science and Engineering Investigations, Vol. 7, Issue 75, April 2018
- “Innovative Synthesizer Model for Box shaped Acoustic Guitar Notes”, Minakshi Pradeep Atre, Dr Shaila D Apte, Chapter in Book Series by Springer AISC, ISSN Number - 2194-5357, Conference Proceedings by Springer AISC [ISSN Number - 2194-5357]
- “Innovative Synthesizer Model for Box shaped Acoustic Guitar Notes”, presented by Minakshi Pradeep Atre, Dr Shaila D Apte, on 27th, 28th February 2018, <http://www.icict.co.uk/registered-and-accepted-papers.php> , ICICT 2018, held at Brunel University, London, UK organized by Springer and IEEE
- “Offside detection in the game of Football using Contour Mapping”, Pratik N Patil, Rebecca J Salve, Karanjit R Pawar , Prof. Mrs. M.P. Atre, in International Refereed Journal of Engineering and Science (IRJES), ISSN (Online): 2320-9364, ISSN (Print): 2320-9356 www.ijres.org Volume 6 Issue 4 Ver. II II 2018 II PP. 66-69
- “Infrared Hand Vein Detection”, Sai D Godse, Sayali S Siddheshwar, Snehal N Avachar, Prof Mrs M P Atre, International Journal of Current Advanced Research, May 2018 issue, IJCAR-6828/2018, Vol. 7, Issue, 6(A), pp. 13182-13184, June, 2018
- “Mathematical Analysis of Acoustic Guitar Notes”, Minakshi Pradeep Atre, Dr Shaila D Apte, International Journal of Signal Processing, ISSN: 2367-8984, Volume 2, 2017
- “Timbre: the color of sound”, Minakshi Pradeep Atre, Prof S L Sahare, in CiiT International Journal, June-2011

Details of books / book chapters published:

- “Impulse Response Modeling of the Box Shaped Acoustic Guitar” by Dr Minakshi Pradeep Atre and Shaila Apte, published in Music and Health Book Series by IntechOpen, UK, 1st Sep 2021, Open Access Peer Reviewed Book Series
- “Covid-19: Loose Ends”, Minakshi Pradeep Atre, a Chapter in Springer Nature Series, Singapore, Intelligent Systems and Methods to Combat Covid-19 pp 65-73, | https://link.springer.com/chapter/10.1007/978-981-15-6572-4_8

Details of FDPs / STTPs attended in last 5 years:

- IIITDMJ FDP on “Deep Learning Applications”
- IIITDMJ FDP on “Machine Learning for Computer Vision”
- IIITDMJ FDP on “Data Science for All”
- IIITDMJ FDP on “Python”

- Attended FDP on “Promoting Quality Culture in Technical Institutions” from 25th May to 29th May 2020, Organised under PARAMARSH scheme by IQAC Cell of AISSMS College of Engineering, Pune
- Attended FDP on “Recent Trends in Technology and Digital Education” organized by MMCOE in association with ISTE from May 27th to 29th, 2020.
- NPTEL Signals and Systems
- Attended AICTE sponsored workshop on One Week CEP on “Image Processing using Matlab”, during 12-16 June 2017, at College of Engineering Pune.
- Attended workshop on “Speech Processing and its applications” at JSPM’s RSCOE, Tathwade from 24th August to 27th August 2016
- 5 **Coursera Certifications** in the domain of AI and ML and MATLAB
- 5 **MATLAB Certifications**
- 9 **Elsevier Certifications**

Major Portfolios Handled: (college level and department level)

- “Study-Go-Work-Japan” International Recruitment Program Coordinator
- Cultural Coordinator
- Exam Coordinator
- Robotics Club Coordinator
- Website Coordinator
- Audit Course Coordinator
- Magazine Coordinator
- MoU Coordinator
- IIC coordinator
- NISP Coordinator

Role in University Bodies:

- Subject Expert: Signals and Systems, SPPU FOW
- Subject Expert: Artificial Intelligence, SPPU FOW
- Subject Expert: Digital Signal Processing, SPPU, FOW
- Subject Expert: Audio-Video Engineering, SPPU FOW
- Syllabus Committee Member, AI subject, Bharati Vidyapeeth
- Syllabus Committee Member, DSP subject, SPPU

Any other information:

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