

# Curriculum Profile

## **Dr. Ravindra Kacharu Munje**

### **Professor and I/C Head of the Department**

#### **Correspondence Address:**

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## **Biography**

Dr. Ravindra Munje acquired B.E., M.E., and Ph.D. degrees respectively from Mumbai University in 2005, Pune University in 2009, and Swami Ramanand Teerth Marathwada University in 2015. He was a Post-Doctoral Fellow at Shanghai Jiao Tong University, Shanghai from June 2017 to May 2019. During his post-doc, he received research funds of around 15 lakh rupees from the National Natural Science Foundation of China as an International Young Scientist.

Currently, he is a Professor and in-charge head of the Electrical Engineering Department, K. K. Wagh Institute of Engineering Education and Research, Nashik, India. He is also the Dean (R&D) of the K. K. Wagh Institute of Engineering Education and Research. Additionally, he holds the position of the AICTE IDEA Lab coordinator of the prestigious project of AICTE and the Convener of the Institution's Innovation Council of the Institute. He has written a book and about 65 refereed papers. His research interests include modeling and control of large-scale systems using sliding mode and multirate output feedback. He has guided 9 PG students and currently guiding 4 PhD scholars.

Dr. Munje received the Promising Engineer Award in 2016, the Outstanding Researcher Award in 2018, and the Best Faculty Award in 2019. In the recent past, he has been awarded Senior IEEE Membership for significant contribution to the profession. He is actively involved in the volunteering work of the Institution of Engineering and Technology (IET-UK). He was the Chairman of the IET Nashik Local Network from January 2021 to December 2023. Currently, he is a member of the Communities Committee South Asia (CCSA) of IET.

He also writes articles and poems in Marathi. He has written around 30 poems and 10 articles on various subjects and published on social media and in newspapers. Besides writing he loves drawing pencil sketches in his leisure time.

## Academic Records:

Degree/ Course	Branch/ Discipline	Passing Year	% Marks/ CGPA	University/ Board	Passing College/ Institute	Class/ Remark
Post-Doctorate	Automation	MAY 2019	NA	Shanghai Jiao Tong University	School of Electronics, Information and Electrical Engineering, SJTU, Shanghai	NA
	<b>Supervisor: Professor Weidong Zhang</b> , Professor, Department of Automation, SEIEE, SJTU					
Doctorate	Electrical (Control Systems)	MAR 2015	8.43 (Course Work)	S.R.T.M. University, Nanded	Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, India	Completed within 4.5 years
	<b>Supervisors: (1) Prof. (Dr.) Balasaheb M. Patre</b> , Professor, and Dean, S.G.G.S.I.E. & T., Nanded. <b>(2) Prof. (Dr.) Akhilanand P. Tiwari</b> , Outstanding Scientist, BARC, Mumbai					
Master's	Electrical (Control Systems)	DEC 2009	79.00 %	Pune University	K. K. Wagh Institute of Engineering Education and Research, Nashik, India	<b>(University Topper)</b>
Bachelor's	Electrical	JUNE 2005	62.45 %	Mumbai University	Sardar Patel College of Engineering, Mumbai, India	1 <sup>st</sup> Class
Higher Secondary	General Science	FEB 2001	82.67 %	Amravati Divisional Board	J. C. High-school and Junior College, Karanja (Iad), Dist-Washim, Maharashtra, India	1 <sup>st</sup> Class with Distinction
Secondary	NA	MAR 1999	77.86 %			
GATE	Electrical	FEB 2007	289 Marks	IITs	-----	Valid Score

## Experience Records:

Teaching Experience: 17 Years, 6 months

Research Experience: 2 Years,

Industrial Experience: 4 Months

Position	Institute/ Organization	Period	Experience in Months
Professor	K. K. Wagh Institute of Engineering Education and Research, Nashik (Approved: CCO/139-18-01-2022)	July 2021 to till date	30
Associate Professor	K. K. Wagh Institute of Engineering Education and Research, Nashik. (Approved: CCO/2521-14-09-2017)	July 2015 to June 2021	72
Post-Doctoral	Shanghai Jiao Tong University, Shanghai	June 2017 to May 2019	24
Assistant Professor	K. K. Wagh Institute of Engineering Education and Research, Nashik. (Approved: CCO/4346-01-06-2013)	Dec 2012 to June 2015	30.5
Assistant Professor	Sandip Institute of Engineering and Management, Nashik. (Approved: CCO/3249-10-01-2011)	July 2010 to Dec 2012	29
Lecturer	MET's Institute of Engineering, Nashik. (Approved CCO/2336-01-01-2010)	Aug 2007 to July 2010	35
Junior Engineer	Maharashtra State Electricity Distribution Co. Ltd.	April 2007 to Aug 2007	4
Lecturer	Lokmanya Tilak College of Engineering, Koparkhairane, Navi-Mumbai. (Contract Basis)	Mar 2006 to April 2007	12

### Administrative Experience:

1. **Dean (Research and Development)** - K. K. Wagh Institute of Engineering Education and Research, Nashik, Since January 2024
2. **I/C Head of the Department** - Electrical Engineering Department, K. K. Wagh Institute of Engineering Education and Research, Nashik, Since January 2020
3. **Coordinator:** AICTE-IDEA Lab Coordinator at K. K. Wagh Institute of Engineering Education and Research from June 2021
4. **Convener:** Institution's Innovation Council of the K. K. Wagh I. E. E. & R., Nashik
5. **R&D Coordinator:** Department R&D coordinator since June 2019
6. **Academic and Research Coordinator** - Savitribai Phule Pune University, Pune, Since June 2019
7. **Coordinator:** Innovation Centre Development Coordinator at K. K. Wagh I. E. E. & R., Nashik, Since September 2019.
8. **PG Coordinator** – ME (Control System), Electrical Engineering Department, K. K. Wagh Institute of Engineering Education and Research, Nashik, June 2015 to May 2017
9. **Head of the Department** – Electrical Engineering Department, Sandip Institute of Engineering and Management, Nashik, July 2010 to January 2012

### Professional Web-pages:

Source	Web Page	Citations
Google Scholar	<a href="https://scholar.google.com/citations?user=Z8Jz7KsAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=Z8Jz7KsAAAAJ&amp;hl=en</a>	402 (h-index 11)
Research Gate	<a href="https://www.researchgate.net/profile/Ravindra_Munje">https://www.researchgate.net/profile/Ravindra_Munje</a>	339 (h-index 10)
SCOPUS	<a href="https://www.scopus.com/authid/detail.uri?authorId=36976163700">https://www.scopus.com/authid/detail.uri?authorId=36976163700</a>	244 (h-index 9)
Vidwan	<a href="https://vidwan.inflibnet.ac.in/profile/185345">https://vidwan.inflibnet.ac.in/profile/185345</a>	402 (h-index 11)
ORCID	<a href="https://orcid.org/0000-0003-4290-684X">https://orcid.org/0000-0003-4290-684X</a>	
Linkedin	<a href="https://www.linkedin.com/in/dr-ravindra-munje-4abb04102/">https://www.linkedin.com/in/dr-ravindra-munje-4abb04102/</a>	
Personal Web	<a href="https://sites.google.com/view/dr-ravindra-munje">https://sites.google.com/view/dr-ravindra-munje</a>	

### Funds and Projects Received:

Details of Funding Agency	Funds Received	Duration and Year	Role	Status
Research Funds for International Young Scientists, National Natural Science Foundation of China (6171101132)	CNY 150k	1 Yr. 2018	Principal Investigator	Completed
Board of College and University Department (BCUD), Savitribai Phule Pune University	₹ 150k	2 Years 2014-16	Principal Investigator	Completed
Centre for Technology Alternatives for Rural Areas, Indian Institute of Technology Bombay	₹ 116k	0.5 Years 2015-16	Principal Investigator	Completed

Board of College and University Department (BCUD), Savitribai Phule Pune University	₹ 200k	2016-17	Principal Investigator	Completed
Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy, Government of India (2009/36/102–BRNS).	₹ 1800k	3 Yrs. 2010-13	Part-Time Research Scholar	Completed
AICTE-IDEA Lab	₹ 10975000	11-08-2021 (Two Years)	Coordinator	Ongoing

### Patents:

1. Dr. Ajinkya Joshi, **Dr. Ravindra Munje** and Mr. Vardhan Joshi, “Train Departure Time Indicator Cum Warning system”, Application No. 202321015600, published in ‘The Official Journal of The Patent Office’ Issue No. 12/2023 dated 24th March 2023.
2. **Dr. Ravindra Munje**, Dr. Ajinkya Joshi and Mr. Vardhan Joshi, “A Neck Guard for a Two Wheeler Rider”, Application No. 202321025186, published in ‘The Official Journal of The Patent Office’ Issue No. 19/2023 dated 12th May 2023.
3. Dr. Ajinkya Joshi, **Dr. Ravindra Munje**, Mr. Vardhan Joshi, Dr. Satish Banait, Prof. Archana Banait, Prof. Vishwas Takate and Mr. Akshay Sonawane, Design Patent - “I-card Holder”, Application No. 384556-001. FER filed - application under examination.
4. Dr. Ajinkya Joshi, **Dr. Ravindra Munje**, Mr. Vardhan Joshi, Dr. Satish Banait, Prof. Archana Banait, Dr. Vilas Patil and Mrs. Rupali Jadhav, Design Patent - “Wheel Disc with Finger Grip”, Application No. 384597-001. FER filed - application under examination.
5. Dr. Ajinkya Joshi, **Dr. Ravindra Munje**, Mr. Vardhan Joshi, Dr. Satish Banait, Prof. Archana Banait and Dr. Vilas Patil, Design Patent - “Wheel Disc with Handle Arrangement”, Application No. 385362-001. FER filed - application under examination.
6. Dr. Ajinkya Joshi, **Dr. Ravindra Munje**, Mr. Vardhan Joshi, Dr. Vilas Patil, Prof. Prakash Kadave, Prof. Sudhir Shinde and Mr. Akshay Sonawane, Design Patent - “Acupressure Wooden Device”, Application No. 390887-001. Status - Granted on 15th November 2023
7. **Dr. Ravindra K. Munje**, Vaibhav Nikam, Durgesh Shintre, Somesh Khavane, Pavan Avhad Innovation Patent – “Wheelchair for Physically Disabled People with Voice, Ultrasonic and Infrared Sensor Control” Application No.: 202221067587A Status- Published on 02/12/2022

### Publications:

#### Monograph Publication:

**R. K. Munje**, B. M. Patre, A. P. Tiwari, “Investigation of Spatial Control Strategies with Application to Advanced Heavy Water Reactor” Springer, Energy Systems in Electrical Engineering Series, ISBN - 9789811030147,

URL: <http://www.springer.com/cn/book/9789811030130#aboutBook>

#### Journal Publications Available Online:

- [1] **Ravindra Munje**, Ranveer Desai, Balasaheb Patre, “Observer-based Integral Sliding Mode Controller for a Two-Wheeled Inverted Pendulum” ECTI Transactions on Electrical Engineering, Electronics, and Communications, 21(1), 248610. URL: <https://doi.org/10.37936/ecti-eec.2023211.248610>
- [2] **Munje, Ravindra**, Zhang, Weidong, "Observer-based Multirate Feedback Control Design for Two-time-scale" System. *Int. J. Automation and Computing* Vol. 18, pp. 1007-1016, 2021 URL: <https://link.springer.com/article/10.1007/s11633-020-1268-6#citeas>

- [3] **R. K. Munje**, S. Lin, G. Zhang, and W. Zhang, "Observer-Based Output Feedback Integral Control for Coal-Fired Power Plant: A Three-Time-Scale Perspective," in *IEEE Transactions on Control Systems Technology*. Impact Factor: 4.88, doi: 10.1109/TCST.2018.2879045.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8537913&isnumber=4389040>
- [4] **R. K. Munje**, D. Gu, R. Desai, B. M. Patre and W. Zhang, "Observer-Based Spatial Control of Advanced Heavy Water Reactor Using Time-Scale Decoupling," in *IEEE Transactions on Nuclear Science*, vol. 65, no. 11, pp. 2756-2766, Nov. 2018, Impact Factor: 1.44. doi: 10.1109/TNS.2018.2873803.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8481370&isnumber=8534509>
- [5] **R. K. Munje**, B. M. Patre, P. S. Londhe, A. P. Tiwari and S. R. Shimjith, "Investigation of Spatial Control Strategies for AHWR: A Comparative Study," in *IEEE Transactions on Nuclear Science*, vol. 63, no. 2, pp. 1236-1246, April 2016, Impact Factor: 1.44. doi: 10.1109/TNS.2016.2519606.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7454883&isnumber=7454804>
- [6] **R. K. Munje**, B. M. Patre, and A. P. Tiwari, "Discrete-Time Sliding Mode Spatial Control of Advanced Heavy Water Reactor," in *IEEE Transactions on Control Systems Technology*, vol. 24, no. 1, pp. 357-364, Jan. 2016, Impact Factor: 1.488. doi: 10.1109/TCST.2015.2432136.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7114265&isnumber=7361777>
- [7] **R.K. Munje**, B.M. Patre, "Spatial Power Control of Singularly Perturbed Nuclear Reactor," *Control Engineering & Applied Informatics*, Volume 18, 2016, Pages 22-29, ISSN 1454-8658, Impact Factor: 0.449.  
<http://www.ceai.srait.ro/index.php?journal=ceai&page=article&op=view&path%5B%5D=2936>
- [8] **R.K. Munje**, J.G. Parkhe, B.M. Patre, "Control of xenon oscillations in Advanced Heavy Water Reactor via two-stage decomposition," *Annals of Nuclear Energy*, Volume 77, 2015, Pages 326-334, ISSN 0306-4549, Impact Factor: 1.467 doi: <https://doi.org/10.1016/j.anucene.2014.11.029>.  
URL: <http://www.sciencedirect.com/science/article/pii/S0306454914006318>
- [9] **R. K. Munje**, B. M. Patre, and A. P. Tiwari, "Periodic Output Feedback for Spatial Control of AHWR: A Three-Time-Scale Approach," in *IEEE Transactions on Nuclear Science*, vol. 61, no. 4, pp. 2373-2382, Aug. 2014, Impact Factor: 1.44, doi: 10.1109/TNS.2014.2327691.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6866243&isnumber=6878509>
- [10] **R. K. Munje**, B. M. Patre, S. R. Shimjith, and A. P. Tiwari, "Sliding Mode Control for Spatial Stabilization of Advanced Heavy Water Reactor," in *IEEE Transactions on Nuclear Science*, vol. 60, no. 4, pp. 3040-3050, Aug. 2013, Impact Factor: 1.44. doi: 10.1109/TNS.2013.2264635.  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6544294&isnumber=6579689>
- [11] **R. K. Munje**, B. M. Patre, A.P. Tiwari, "Non-linear simulation and control of xenon induced oscillations in Advanced Heavy Water Reactor," *Annals of Nuclear Energy*, Volume 64, 2014, Pages 191-200, ISSN 0306-4549, doi: <https://doi.org/10.1016/j.anucene.2013.09.038>. IF: 1.467  
URL: <http://www.sciencedirect.com/science/article/pii/S0306454913005082>
- [12] R. J. Desai, B. M. Patre, **R. K. Munje**, A. P. Tiwari and S. R. Shimjith, "Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor," in *IEEE Transactions on Nuclear Science*. doi: 10.1109/TNS.2020.2990180  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9078035&isnumber=4689328>
- [13] **MUNJE, Ravindra**; BUWA, Omkar; AHIRE, Rupali. On Identifying Advanced, Average and Slow Learners: Case Study. *Journal of Engineering Education Transformations*, p. 417-424, January 2021. ISSN 2394-1707. URL: <http://www.journaleet.in/index.php/jeet/article/view/157190>
- [14] **R. K. Munje**, "Project-Based Learning: Teaching Methodology to Impart Knowledge and Skills" *Journal of Engineering Education Transformations*, Vol. 35, pp: 326-333, 2022

URL: <https://journaleet.in/articles/project-based-learning-teaching-methodology-to-impart-knowledge-and-skills>

- [15] Gade, S., Agrawal, R., & **Munje, R.** (2021). Recent Trends in Power Quality Improvement: Review of the Unified Power Quality Conditioner. *ECTI Transactions on Electrical Engineering, Electronics, and Communications*, 19(3), 268–288. <https://doi.org/10.37936/ecti-eeec.2021193.244936>
- [16] B. B. Musmade, **R. K. Munje**, B. M. Patre, “Design of Sliding Mode Controller to Chemical Processes for Improved Performance”, *International Journal of Control and Automation*, (ISSN: 2005-4297), H-Index: 11, Vol. 4 No. 1, March 2011, pp. 15-32. (Impact Factor-0.86)  
URL: <http://connection.ebscohost.com/c/articles/61136662/design-sliding-mode-controller-chemical-processes-improved-performance>
- [17] B. J. Parvat, **R. K. Munje**, “Accurate Model Development and Control of Chemical Processes”, *International Journal of Computer Applications*, No. 2, March 2012, ISSN: 0975-8887, ISBN: 978-93-80866-60-2 (Impact Factor-0.83)
- [18] D. M. Sonje, **R. K. Munje**, “Rotor Cage Fault Detection in Induction Motors by Motor Current Signature Analysis”, *International Journal of Computer Applications*, No. 2, March 2012, pp. 22-26, ISSN: 0975-8887, ISBN: 978-93-80866-60-2 (Impact Factor-0.83)  
URL: <https://journals.sagepub.com/doi/abs/10.1177/0142331214536201>
- [19] Prathmesh Kulkarni, Ritesh Patil, Manoj Kastoore, Abhishek Shinde, & **Ravindra Munje** (2022). Development of Object Identification Glasses for Visually Impaired People. *Journal of Advances in Computational Intelligence Theory*, 4(2), 1–10. <https://doi.org/10.5281/zenodo.6675747>  
URL: <https://zenodo.org/record/6675747#.YviDPnZBzIU>
- [20] Swaraj Birari, Sujay Choukhande, Vishal Daund, Apurva Shinde, & **Ravindra Munje**. (2022). Design and Development of Power Generating Tiles and Demonstration. *Journal of Research and Advancement in Electrical Engineering*, 5(1), 1–7. <https://doi.org/10.5281/zenodo.6646103>  
URL: <https://zenodo.org/record/6646103#.YviDZ3ZBzIU>
- [21] **R. K. Munje**, Pratik Warungase, Manish Sarode, Vishal Lohar, & Aniket Mehare. (2022). Developing a Prototype of Smart Crop Protection System from Animals. *Journal of Emerging Trends in Electrical Engineering*, 4(2), 1–10. <https://doi.org/10.5281/zenodo.6874633> URL: <https://zenodo.org/record/6874633#.YviD3nZBzIU>
- [22] **Ravindra K. Munje**, Deepak M. Sonje, Deepak P. Kadam, “Control of a Two-Wheeled Inverted Pendulum using Integral Sliding Mode,” *International Journal of Mechanical Engineering*, 7 (2), Dec 2022 URL: <https://kalaharijournals.com/resources/02-Dec22.pdf>
- [23] **Ravindra Munje**, Priya Rakibe, Vikrant Nichit, Anup Dudhekar, and Yogita Shewale, “New Approach for Providing Adaptable Curriculum Enrichment through Teaching-Learning and Evaluation”, *Journal of Engineering Education Transformations*, DOI: 10.16920/jeet/2023/v36is2/23064, Year: 2023, Volume: 36, Issue: Special Issue 2, Pages: 425-430
- [24] Umesh Govardhane, Prathamesh Mule, Sakshi Lokhande, Shraddha Jadhav, Dhawal Tagare, **Ravindra Munje**. (2023). PID Controllers for BLDC Motor: A Comparative Study. *Journal of Control System and its Recent Development*, 6(2), 1–24.  
URL: <http://hbrppublication.com/OJS/index.php/JCSIRD/article/view/3475>

### **International Conference Publications:**

1. **R. K. Munje**, D. Gu, B. Xu, and W. Zhang, "Feedback Control Design for Three-Time-Scale System using Two-Time-Scale Approach," *2018 37th Chinese Control Conference (CCC)*, Wuhan, 2018, pp. 4982-4987. doi: 10.23919/ChiCC.2018.8484225



- URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8484225&isnumber=848227>  
1
2. **R. K. Munje** and B. M. Patre, "Fast output sampling controller for three-time scale systems," *2016 Indian Control Conference (ICC)*, Hyderabad, 2016, pp. 456-460. doi: 10.1109/INDIANCC.2016.7441174  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7441174&isnumber=744109>  
2
  3. **R. K. Munje**, Y. P. Patil, B. B. Musmade and B. M. Patre, "Discrete-time sliding mode control for three-time scale systems," *2015 International Conference on Industrial Instrumentation and Control (IIC)*, Pune, 2015, pp. 744-749. doi: 10.1109/IIC.2015.7150841  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7150841&isnumber=715057>  
6
  4. **R. K. Munje**, P. P. Shinde and S. S. Kale, "Performance comparison of PI/PID controllers for DC motor," *2014 Annual IEEE India Conference (INDICON)*, Pune, 2014, pp. 1-3. doi: 10.1109/INDICON.2014.7030359  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7030359&isnumber=703035>  
4
  5. **R. K. Munje** and B. M. Patre, "Multirate output feedback based controllers for non-linear inverted pendulum system," *2013 Annual IEEE India Conference (INDICON)*, Mumbai, 2013, pp. 1-6. doi: 10.1109/INDICON.2013.6726072  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6726072&isnumber=672584>  
2
  6. **R. K. Munje**, P. S. Londhe, J. G. Parkhe, B. M. Patre, and A. P. Tiwari, "Spatial control of advanced heavy water reactor by fast output sampling technique," *2013 IEEE International Conference on Control Applications (CCA)*, Hyderabad, 2013, pp. 1212-1217. doi: 10.1109/CCA.2013.6662917  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6662917&isnumber=666274>  
2
  7. **R. K. Munje**, B. B. Musmade, J. G. Parkhe, and B. M. Patre, "Sliding mode control for three-time scale system with matched disturbances," *2012 Annual IEEE India Conference (INDICON)*, Kochi, 2012, pp. 131-136. doi: 10.1109/INDICON.2012.6420602  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6420602&isnumber=642057>  
5
  8. **R. K. Munje**, M. R. Roda and B. E. Kushare, "Speed control of DC motor using PI and SMC," *2010 Conference Proceedings IPEC*, Singapore, 2010, pp. 945-950. doi: 10.1109/IPEC.2010.5696985  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5696985&isnumber=569695>  
0
  9. S. Suheesan and **R. Munje**, "Robust Observer-based Sliding Mode Control of a Pressurized Water Reactor," *2021 IEEE 18th India Council International Conference (INDICON)*, 2021, pp. 1-6  
URL: <https://ieeexplore.ieee.org/document/9691631>
  10. B. B. Musmade, **R. K. Munje** and B. M. Patre, "Design of Composite Sliding Mode Controller for Large-scale Processes," *2020 SICE International Symposium on Control Systems (SICE ISCS)*, Tokushima, Japan, 2020, pp. 48-54. doi: 10.23919/SICEISCS48470.2020.9083631  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9083631&isnumber=9083485>
  11. P. K. Meghrajani and **R. K. Munje**, "Conceptualizing Full and Reduced Order Linear Observers Using MATLAB GUI," *2018 International Conference On Advances in Communication and*

- Computing Technology (ICACCT)*, Sangamner, India, 2018, pp. 1-6. doi: 10.1109/ICACCT.2018.8529332  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8529332&isnumber=8529319>
12. Pande A. S. and **R. K. Munje**, "Fast Output Sampling Feedback with Two Delayed Inputs for MIMO System," *2018 International Conference On Advances in Communication and Computing Technology (ICACCT)*, Sangamner, India, 2018, pp. 74-78. doi: 10.1109/ICACCT.2018.8529391  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8529391&isnumber=8529319>
  13. R. S. Mane and **R. K. Munje**, "Robust Sliding Mode Control for Three Time-Scale System with LMI Approach," *2017 14th IEEE India Council International Conference (INDICON)*, Roorkee, 2017, pp. 1-4. doi: 10.1109/INDICON.2017.8487757  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8487757&isnumber=8487231>
  14. P. R. Kamthekar, **R. K. Munje** and B. E. Kushare, "Detection and classification of power quality events using DWT and MSD," *2017 International Conference on Innovative Mechanisms for Industry Applications (ICIMIA)*, Bangalore, 2017, pp. 150-157. doi: 10.1109/ICIMIA.2017.7975591  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7975591&isnumber=7975508>
  15. D. Y. Dube and **R. K. Munje**, "Modeling and Control of Unmanned Aerial Vehicle," *2015 International Conference on Energy Systems and Applications*, Pune, 2015, pp. 641-644. doi: 10.1109/ICESA.2015.7503428  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7503428&isnumber=7503297>
  16. P. G. Medewar and **R. K. Munje**, "PSO with modified objective function for performance enhancement of PMDC motor," *2015 International Conference on Energy Systems and Applications*, Pune, 2015, pp. 658-662. doi: 10.1109/ICESA.2015.7503432  
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7503432&isnumber=7503297>
  17. P. G. Medewar and **R. K. Munje**, "PSO based PID controller tuning for PMDC motor," *2015 International Conference on Energy Systems and Applications*, Pune, 2015, pp. 522-526. doi: 10.1109/ICESA.2015.7503404  
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- Communication and Computing Technology (ICACCT)*, Sangamner, India, 2018, pp. 335-339. doi: 10.1109/ICACCT.2018.8529648  
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21. P. R. Kamthekar, P. V. Gautam and **R. K. Munje**, "Detection, characterization, and classification of short duration voltage events using DWT and fuzzy logic," *2017 International Conference on Innovative Mechanisms for Industry Applications (ICIMIA)*, Bangalore, 2017, pp. 242-247. doi: 10.1109/ICIMIA.2017.7975611  
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29. Deirdre D. Sylvester, **R. K. Munje**, "Back Stepping SMC for Blood Glucose Control of Type-1 Diabetes Mellitus Patients", *International Journal of Engineering Technology Science and Research*, ISSN 2394 3386, Volume 4, Issue 5, May 2017  
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URL: <http://www.iosrjournals.org/iosr-jeee/Papers/Conf.17018-2017/Volume-1/5.%2024-31.pdf>
31. P. G. Medhewar, R. R. Sonawane, **R. K. Munje**, "Fuzzy Logic Based Boiler Drum Level Control with GUI" *Proceedings of International Conference (ICCCES-2016) January 2016, Published in International Journal of Innovation in Engineering Research and Technology*, ISSN No-2391-3696.  
URL: [https://www.ijert.org/admin/papers/1454325240\\_ICCCES-16.pdf](https://www.ijert.org/admin/papers/1454325240_ICCCES-16.pdf)
32. **R. K. Munje**, M. R. Roda, "Sliding Mode Control of Isothermal Chemical Reactor", *Proceedings of Pravara International Conference on Emerging Trends in Engineering*, 20-22 December 2008, Loni, pp. 1051-1056.

#### **National Conference Publications:**

1. O. N. Buwa, **R. K. Munje**, "Enhancing Teaching-Learning with ICT Tools: A Case of Electrical Engineering Discipline", *National Conference on Exploring New Dimensions in Teaching–Learning for Quality Education*, 8th and 9th June 2019
2. **R. K. Munje**, B. E. Kushare, "Online Power Quality Disturbance Detection, Characterization and Classification using Wavelet Transform", in *Proceedings of Regional Research Conference for Engineering Teachers, INNOVATION-2016*, October 1, 2016.
3. **R. K. Munje**, B. E. Kushare, "Power Quality Disturbance Detection, Characterization and Classification using Wavelet Transform", in *Proceedings of Regional Research Conference for Engineering Teachers, INNOVATION-2015*, July 6, 2015.
4. **R. K. Munje**, P. S. Londhe, J. G. Parkhe, B. M. Patre, "Investigation of FOS Based Controllers for Non-linear Inverted Pendulum System", *National Conference on Instrumentation, Control and Signal Processing*, Nanded, India, 08-09 July 2013.
5. J. G. Parkhe, **R. K. Munje**, P. S. Londhe, B. M. Patre, A. P. Tiwari, "Spatial Control of AHWR Using Periodic Output Feedback", *National Conference on Instrumentation, Control and Signal Processing*, Nanded, India, 08-09 July 2013.
6. P. S. Londhe, J. G. Parkhe, **R. K. Munje**, B. M. Patre, "POF Control for Three-Time Scale Discrete System", *National Conference on Instrumentation, Control and Signal Processing*, Nanded, India, 08-09 July 2013.
7. **R. K. Munje**, B. B. Musmade, M. R. Roda, "Sliding Mode Control of Continuous Fermentation Process", *Proceedings of National Seminar on Advances in Instrumentation, Signal Processing and Communication*, 23-24 January 2009.
8. **R. K. Munje**, B. B. Musmade, M. R. Roda, B. M. Patre, "Design of Sliding Mode Controller for Nonlinear Process", *Proceedings of CISyCon*, MIT Manipal, 7-8 November 2008, pp. 69-71.

#### **MATLAB Model Developed**

1. **RAVINDRA MUNJE** (2020). Multirate Output Feedback-based Controllers for Nonlinear Inverted Pendulum System. MATLAB Central File Exchange. Retrieved May 27, 2020.  
<https://www.mathworks.com/matlabcentral/fileexchange/44837-multirate-output-feedback-based-controllers-for-nonlinear-inverted-pendulum-system>
2. **RAVINDRA MUNJE** (2020). Simulation of Snubber Circuits and observing turn-on of SCR. MATLAB Central File Exchange. Retrieved May 27, 2020.  
<https://www.mathworks.com/matlabcentral/fileexchange/72257-simulation-of-snubber-circuits-and-observing-turn-on-of-scr>
3. **RAVINDRA MUNJE** (2020). Simulation of the step-down chopper with R and RL load. MATLAB Central File Exchange. Retrieved May 27, 2020.  
<https://www.mathworks.com/matlabcentral/fileexchange/72362-simulation-of-step-down-chopper-with-r-and-rl-load>
4. **RAVINDRA MUNJE** (2022). Check for observability and controllability by MATLAB Program (<https://www.mathworks.com/matlabcentral/fileexchange/103490-check-for-observability-and-controllability-by-matlab-progra>), MATLAB Central File Exchange. Retrieved May 3, 2022.
5. **Ravindra Munje** (2022). Effect of sampling and verification of sampling theorem (<https://www.mathworks.com/matlabcentral/fileexchange/102980-effect-of-sampling-and-verification-of-sampling-theorem>), MATLAB Central File Exchange. Retrieved May 3, 2022.
6. **Ravindra Munje** (2022). Plotting of discrete time waveforms (<https://www.mathworks.com/matlabcentral/fileexchange/102965-plotting-of-discrete-time-waveforms>), MATLAB Central File Exchange. Retrieved May 3, 2022.
7. **RAVINDRA MUNJE** (2022). Determining State Transition Matrix and Outputs for DC Motor (<https://www.mathworks.com/matlabcentral/fileexchange/103385-determining-state-transition-matrix-and-outputs-for-dc-motor>), MATLAB Central File Exchange. Retrieved May 3, 2022.
8. **RAVINDRA MUNJE** (2022). State feedback control design for DC Motor (<https://www.mathworks.com/matlabcentral/fileexchange/103485-state-feedback-control-design-for-dc-motor>), MATLAB Central File Exchange. Retrieved May 3, 2022.
9. **Ravindra Munje** (2022). Convert a continuous-time system to a discrete-time system (<https://www.mathworks.com/matlabcentral/fileexchange/102990-convert-a-continuous-time-system-to-a-discrete-time-system>), MATLAB Central File Exchange. Retrieved May 3, 2022.
10. **RAVINDRA MUNJE** (2022). State space 2 transfer function and vice-versa with the response (<https://www.mathworks.com/matlabcentral/fileexchange/103380-state-space-2-transfer-function-and-vice-versa-with-response>), MATLAB Central File Exchange. Retrieved May 3, 2022.
11. **RAVINDRA MUNJE** (2022). State space 2 transfer function and vice-versa with the response (<https://www.mathworks.com/matlabcentral/fileexchange/103380-state-space-2-transfer-function-and-vice-versa-with-response>), MATLAB Central File Exchange. Retrieved May 3, 2022.
12. **Ravindra Munje** (2022). Simulation of a lead compensator for a given system (<https://www.mathworks.com/matlabcentral/fileexchange/116055-simulation-of-a-lead-compensator-for-a-given-system>), MATLAB Central File Exchange. Retrieved August 14, 2022.

13. **Ravindra Munje** (2022). Simulation of a lag compensator for a given system (<https://www.mathworks.com/matlabcentral/fileexchange/115860-simulation-of-a-lag-compensator-for-a-given-system>), MATLAB Central File Exchange. Retrieved August 14, 2022.

### Courses Developed:

Sr. No.	Name of the course	Type and Credits	Students/ Learners	No. of Registrations	Course Link
1	Learning to write a scientific research paper	Online Course	The course is available on the Udemy Platform and is open for all students (UG/PG/Ph.D.)	3278	<a href="https://www.udemy.com/course/learning-to-write-scientific-research-paper/">https://www.udemy.com/course/learning-to-write-scientific-research-paper/</a>
2	Understanding Academic Project Life Cycle	Certificate Course	This course is designed as a value-added course for Second Year students	All SE students of the department	<a href="https://sites.google.com/view/courseelectrical/value-added-course-project-life-cycle">https://sites.google.com/view/courseelectrical/value-added-course-project-life-cycle</a>
3	Advanced Control System	UG (BE) Course, 4 Credit	Savitribai Phule Pune University, Pune	All students of SPPU	<a href="https://engg.kkwagh.edu.in/media/post_image/BE_Electrical_2019_Syllabus_(1).pdf">https://engg.kkwagh.edu.in/media/post_image/BE_Electrical_2019_Syllabus_(1).pdf</a>
4	Research Writing	Certificate Course	This course is designed for PhD students	32	Content is not available online

### Conferences Attended:

1. Attended **International Conference on Transformations in Engineering Education**, organized by **IUCEE and Vidyavardhaka College of Engineering**, Mysuru, Karnataka, India, January 5-8, 2023.
2. Attended **IUCEE Leadership Summit** (virtual), on July 9, 10 and 11, 2021.
3. Attended International Conference on Transformations in Engineering Education (Virtual) on January 7-9, 2022 organized by **Indo Universal Collaboration for Engineering Education (IUCEE)**
4. **Regional Research Symposium on PBL** organized by Karnataka State Higher Education Council, Bengaluru (India) in **Collaboration with Aalborg Centre for Problem-Based Learning in Engineering Science and Sustainability** under the auspices of UNESCO, Aalborg University, DENMARK, June 18-19, 2021
5. Wharton India Economic Forum, Mumbai Conference on January 10, 2020, at The St. Regis Mumbai
6. IET India organized **Engineering the Future of Work** on October 22, 2019, at Taj Lands End, Mumbai
7. Annual Industry-Academia Conference "Education – Creating a Digital Ecosystem" on September 28, 2019, organized by Computer Society of India, Mumbai Chapter
8. 6<sup>th</sup> Peiyang Forum for **International Young Scholars** at Tianjin University, Tianjin, China on December 28-29, 2018
9. 37<sup>th</sup> **Chinese Control Conference (CCC)**, Wuhan, 2018
10. **Indian Control Conference (ICC)**, Hyderabad, 2016
11. International **Conference on Industrial Instrumentation and Control (ICIC)**, Pune, 2015

12. South Asia **Community Volunteer Conference** 2015 organized by IET, India at Lonavala on October 5, 2015.
13. Annual IEEE India Conference (**INDICON**), Mumbai, 2013
14. IEEE International **Conference on Control Applications** (CCA), Hyderabad, 2013
15. Annual IEEE India Conference (**INDICON**), Kochi, 2012
16. **International Power and Energy Conference** (IPEC), Singapore, 2010

### **Achievements/ Awards/ Recognitions/ Associations:**

1. Selected as a Member of Communities Committee South Asia (CCSA), IET (UK) from Nashik Local Network and member of IET Nashik Local Network Body 2023-24.
2. Elected as **Chairman** of IET Nashik Local Network from January 2021 to December 2023
3. Elevated to **Senior IEEE Membership** (90540156) from December 2019
4. Received "**Best Faculty Award**" by Computer Society of India, Mumbai Chapter, on 28<sup>th</sup> September 2019.
5. Received "**Green ThinkerZ – Outstanding Researcher Award**" of the Year 2018 awarded by Green ThinkerZ Society, Panjab, India
6. Recipient of Research Funds for **International Young Scientists**, National Natural Science Foundation of China, P. R. China for the Year 2018.
7. Received "**Promising Engineer Award**" by Institution of Engineers (India), Nashik Local Centre on October 14, 2016.
8. Received **Gold Medal** for securing the first rank in the Pune University in ME Electrical Control Systems.
9. Recognized **PG Teacher** of Savitribai Phule Pune University from June 2017
10. Recognized **Ph.D. Guide** of Savitribai Phule Pune University from March 2019
11. Selected as Chairman of the Young Professional Section of IET (UK) Nashik Local Network for 2014-2016.
12. Selected as a Member of Communities Committee South Asia (CCSA), IET (UK) from Nashik Local Network and member of IET Nashik Local Network Body 2016-17.
13. **Reviewer** for IEEE Transactions on Nuclear Science, Annals of Nuclear Energy, Nuclear Engineering and Design, Asian Control Conference 2015, Chinese Control Conference, IEEE Access.
14. **Session Chair** for National Conference on "Emerging Trends in Engineering and Technology" 24-25 March 2017 on 25 March 2017.
15. **Session Chair** for the "Paper Presentation Competition" in Telekinesis 2k16, on 16 March 2016 at K. K. Wagh I. E. E. & R., Nashik.
16. **Judge** for **the Present Around the World Competition** held by Mumbai Local Network on 28 February 2014
17. **Session chair** for Techxellence 2012 at Sandip Foundation's SITRC on 14 September 2012.
18. **Ex. Chairman, Board of Studies**, for Diploma, B.Tech, M.Tech in Electrical Program offered by various institutions on collaborative arrangements under Karnataka State Open University, Mysore, India.

### **Memberships of Professional Bodies:**

<b>Professional Body</b>	<b>Category</b>	<b>Membership No.</b>	<b>Since</b>
Indian Society for Technical Education (ISTE)	Life Member	LM 51336	11-01-2007

Institute of Electrical and Electronics Engineers (IEEE)	Senior Member	90540156	01-01-2013
The Institution of Engineering and Technology (IET)	Member	1100309977	12-09-2013
The Institution of Engineers India (IEI)	Member	M-149707-8	21-09-2014
International Association of Engineers (IAE)	Member	254706	20-01-2020

### Events and Workshops organized:

Name of the Event	Date	Resource Person	No. of Participants	Supported by
IET Karmaveer Expo 2023	29 <sup>th</sup> April 2023	Shri. Mukul Srivastava	200	IET (UK) Nashik Local Network and Industry
International FDP on Advanced Topics in Control System	22nd to 24th September 2022	Dr.Mohammadhosein Sabzalian, Dr Vidyasagar, Dr Vineet, Dr. Sadala, Dr. Khandekar	109	IET (UK) Nashik Local Network
Research Talk	7 March 2020	Rahul Bhat, Vishal Puranik, Prashant Medhewar, Harshada Nerkar	35	IET (UK) Nashik Local Network
Organized Training Program on "MATLAB Applications in Electrical Engineering"	3 Aug 2015	The expert from ADCC Infocad Ltd.	34	IET (UK) and ADCC Infocad Limited
Organized a National level Workshop on "Technical Writing with LaTeX"	24-25 Sep 2016	Dr. P. S. Londhe, Government College of Engineering, Chandrapur	23	IET (UK)
		Dr. R. K. Munje		
		Dr. P. M. Sonawane		
Organized National Power Energy and Control Conference (NPECC) 2016-17	23-24 Dec 2016	Dr. A. P. Tiwari, Outstanding Scientist, Bhabha Atomic Research Centre, Mumbai	48	BCUD Pune and IET (UK)
		Prof. (Dr.) B. E. Kushare		
Coordinated a Two-week ISTE Workshop on "Control Systems"	2-12 Dec 2014	Dr. Siddhartha Mukhopadhyay Dr. Tapan Kumar Ghoshal	28	NMEICT, MHRD, GoI, IIT Kharagpur

### Expert Talks Delivered:

Topic	Type of Event	Place	Date	Session Duration
Emerging Trends in Electrical Engineering	National Conference on "Emerging Trends in Engineering and Technology" 24-25 March 2017	Loknete Gopinathji Munde Institute of Engineering Education and Research, Nashik	25 March 2017	Key Note
Sliding mode control for AHWR, Observer-based design for AHWR	QIP STTP on Advanced Topics in Control System and Application	SGGS Institute of Engineering and Technology, Nanded	4 July 2019	One Day



Simulating Power Electronics Circuits with Matlab	One week STTP on "Hardware-in Loop Technologies" from September 25-29, 2018	Sandip University, Nashik	28 Sept. 2018	One Day
LaTeX Programming	One Day Seminar	Yadavrao Tasgaonkar Institute of Technology, Karjat	17 Oct. 2015	One Day
MATLAB Applications in Electrical Engineering	Two Week STTP on "MATLAB Applications in Engineering and Science" on 15-26 December 2014.	Government College of Engineering, Awasari	20 Dec. 2014	One Day
Latex for Beginners	One Day Workshop	Maharashtra Institute of Technology, Aurangabad	17 Nov. 2011	One Day
Latex for Beginners	One Day Workshop	G. H. Rasoni College of Engineering and Management	14 Oct. 2011	One Day
Observer-based feedback control design for a two-time-scale system with Hands-on	One Week STTP on Advanced Topics in Control System and Signal Processing	RAIT, Navi Mumbai	16 Dec 2019	Half Day
Sliding Mode Control for Nuclear Reactor	A three days' workshop on "Advances in Non-Conventional Energy and Control Systems" 22-24 Feb 2016	Vishwakarma Institute of Technology, Pune	24 Feb. 2016	Half Day
Research and Innovation	Faculty Development (FDP) 'Innovation, IPR, and Technical Writing'	KVN Naik SPS Loknete Gopinathji Munde Institute of Engineering Education and Research,	Nashik on 17th May 2023.	2 Hours
PID Control Design using Root Locus	Expert Talk	K. K. Wagh I. E. E. & R., Nashik	25 Feb. 2019	2 Hours
Overview of the Control System for the GATE Exam	Expert Talk	Sandip Institute of Engineering and Management	6 Feb. 2019	2 Hours
PG Project: Beginning of Professional Life	Expert Talk	K. K. Wagh I. E. E. & R., Nashik	20 Feb. 2018	2 Hours
Writing and Publishing Scientific Research Papers	Expert Talk	Sandip University, Nashik	2 Feb. 2018	2 Hours
Sliding Mode Control for AHWR	Expert Talk	College of Engineering Ambajogai, Beed, India	28 Jan. 2017	2 Hours
Effective Research Paper Writing	Expert Talk	Matoshri College of Engineering and Research Center, Nashik	5 March 2016	2 Hours
Preparation of Technical Report in LaTeX	Expert Talk	Matoshri College of Engineering and Research Center, Nashik	27 Jan. 2015	2 Hours
MATLAB and Its Application	Expert Talk	K. K. Wagh Polytechnic, Nashik	26 Sept. 2014	2 Hours

Modeling and Control of Inverted Pendulum	Expert Talk	K. K. Wagh I. E. E. & R., Nashik	20 Jan. 2014	2 Hours
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### Research Interests:

1. Broad research area includes Modeling of Large-Scale Systems and the design of controllers based on modern control techniques such as Multirate Output Feedback (like Fast Output Sampling and Periodic Output Feedback), Singular Perturbation Techniques, and Sliding Mode Control.
2. Other research interests are Modeling of Dynamical systems, Nonlinear control, Optimal control, Adaptive control, Power Quality, and Fractional order control systems.

### PhD Students:

Name of Topic of PhD Topic	Registration Year	Name of Student	Current Status
Classification of faults in power systems using machine learning techniques	18/04/2022	Anuradha Ghotekar	Ongoing
Measurement and Analysis of Transient Overvoltages in GIS Coupled Power Transformer	18/04/2022	Rupali Ahire	Ongoing
Frequency control techniques for isolated hybrid power system	22/10/2022	Diksha Ahire	Ongoing
Analysis of Dynamic Performance of Electric Vehicles	18/04/2022	Minal Rade	Ongoing

### PG Projects Guided:

Name of Topic of PG Project	Completion Year	Name of Student	Current Status
Modeling and Control of Unmanned Ground Vehicle	2014-15 (Dec)	Piyush Dave	Pursuing Ph.D. at BARC, Mumbai
Modeling and Control of Unmanned Aerial Vehicles	2014-15 (May)	Deepali Dubey	Pursuing Ph.D. at SVNIT, Surat
PSO-based PID Tuning for PMDC Motor	2014-15 (May)	Prashant Medhewar	Pursuing Ph.D. at SVNIT, Surat
PID For Cascade Control System	2015-16 (May)	Ankit Jain	Assistant Professor at MET's IOE, Nashik
Robust Control of Nuclear Reactor	2015-16 (May)	Rahul Mane	Assistant Professor at K. K. Wagh I. E. E. & R., Nashik
Detection, Characterization, and Classification of Short Duration Voltage Events using DWT and Fuzzy logic	2015-16 (May)	Pallavi Kamthekar	Assistant Professor at SGGGS IET, Nanded
Multirate Output Feedback Control for Inverted Pendulum	2015-16 (May)	Arvind Pande	Pursuing a Ph.D. at Sandip University, Nashik
Back Stepping SMC for Blood Glucose Control of Type-1 Diabetes Mellitus Patients	2016-17 (May)	Deirdre D. Sylvester	Relocated to Dubai
Robust Control of Nuclear Reactor	2020-21 (May)	Soubhagya Suheesan	--

## UG Projects Guided:

Name of Topic of UG Project	Completion Year	Name of Student	Type of Project
Investigation of various control strategies for speed control DC motor.	2013-14	Marathe Vaibhav, Thorait Abhishek, Prakash	Internal Project
Solar-based MPPT Charge controller for lead-acid battery	2014-15	Seema Ahire, Anuja Jadhav, Aastha Jain, Anchal Jain	Sustainable Solution and Research Centre on Renewable Energy, Nashik
Dual-purpose fault detector and status monitoring for ring main unit	2014-15	Baviskar Shivani, Patil Pallavi	C.G. Lucy Switchgears Ltd., Ambad, Nashik
Case study of SCADA operated 220 kV/132 kV old control room Sub-station, Eklahare	2015-16	Sarvadnya Bairagi, Sneha Bodhe, Yogita Palve, Bhagyashri Pawar	Eklahare Thermal Power Plant, Nashik
Investigation of harmonic mitigation techniques using ETAP	2016-17	Koli Samrudhi, Gokhale Gaurish, Suradkar Rahul	Internal Project
Micro-grid using non-congenital sources of energy	2016-17	Saroj Saurabh, Sonawane Ashwini, Chandre Pranjal, Kumar Vikas	Akshaya Udyog, Nashik
Automatic Water Supply Control System with Graded Constant Pressure Using Variable Frequency Drive	2020-21	Nandapurkar Anuj, Shinde Ganesh, Shinde Rahul, Tayade Suyog	Internal Project
Optimum Placement of PMU by using Binary Integer Linear Programming for State Estimation	2020-21	Gholap Tejas, Hargode Yash, Kadam Balraj, Kale Sagar	Internal Project
Smart Crop Protection System From Animals	2021-22	Lohar Vishal, Mehare Aniket, Sarode Manish, Warungase Pratik	Internal Project
Development of Object Identification Glasses (Smart Glasses) for Visually Impaired People	2021-22	Shinde Abhishek, Kulkarni Prathmesh, Kastoore Manoj, Patil Ritesh	Internal Project
Design and Development of Power Generating Tiles and its Implementation in College Campus	2021-22	Birari Swaraj, Choukhande Sujay, Daund Vishal, Shinde Apurva	Internal Project
Development of Capacitive Voltage Sensor in GIS	2022-23	Barhate Piyush Bharat Rathod Prasad Vijay Sonawane Purva Narendra	Industry Project
Design and Development of BLDC Motor Controller for Electric 2 - Wheeler Applications	2022-23	Govardhane Umesh Mahadu Lokhande Sakshi Vilas Mule Prathamesh Bhausheeb Jadhav Shraddha Kishor	Industry Project

Design and Development of Automated Wheelchairs for Physically Disabled People	2022-23	Avhad Pavan, Khavane Somesh, Nikam Vaibhav, Shintre Durgesh	Internal Project
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### Online Courses Attended:

Topic	Organizers	Place	Days/ Weeks	Date/ Month/ Year
Smart eLearning Content Development Course for All, MKCL India	<a href="https://www.udemy.com/">https://www.udemy.com/</a>	Online	One Day	April 2020
Creativity and Entrepreneurship, Berklee College of Music	<a href="https://www.coursera.org/">https://www.coursera.org/</a>		5 Weeks	May 2020
Machine Learning			11 Weeks	July 2018
A Life of Happiness and Fulfillment by Indian School of Business			6 Weeks	November 2017
How to write and Publish a Scientific Paper (Project-Centered Course) by Ecole Polytechnique			4 Weeks	October 2017
Chinese for Beginners by Peking University, China			7 Weeks	August 2017
Introduction to Public Speaking, University of Washington			5 Weeks	September 2017

### Other courses Attended:

Topic	Organizers	Place	Days/ Weeks	Date/ Month/ Year
AICTE IDEA Lab Coordinator's Faculty Development Program	D. Y. Patil International University and AICTE	Pune	One Week	September 23 to 28, 2021
Fractional Order Modeling, Control, and Applications	ISTE Approved, IET Sponsored FDP organized by COEP, Pune	Pune	One Week	29 Feb to 4 March 2016
Renewable Energy Opportunities and Challenges	Mechanical Department, Sinhgad Institute of Technology, Lonavala	Lonavala	One Week	26-30 Oct 2015
Control Systems	Coordinator's Workshop, NMEICT, IIT Kharagpur	IIT Kharagpur	One week	15-19 Sept 2014
Variable Structure and SMC: Theory Concept and Applications	Indian Institute of Technology, Bombay	IIT Mumbai	One Week	21-25 Jan 2013
Control and Dynamical Systems	Indian Institute of Technology, Bombay	IIT Mumbai	One week	25-30 Jan 2010
MATLAB Applications in Engineering	Department of Electrical Engineering Lokmanya Tilak College of Engineering	Navi-Mumbai	One Week	8-12 Jan 2007
Mechatronics: A Journey of Automation Technology	Department of Mechanical Engineering Lokmanya Tilak College of Engineering	Navi-Mumbai	One Week	18-22 Dec 2006

Power Quality and Energy Management and High Voltage Engineering	GRH Sapat College of Engineering in association with IET Nashik Local Network	Nashik	Three Days	22-24 August 2015
Emerging Technologies in Smart Grid	Electrical Department, KKWIEER, in association with the University of Pune	Nashik	Three Days	26-28 December 2014
Power Electronics Systems and Applications	National Institute of Technology, Rourkela, Odisha	NIT Rourkela	Three Days	4-6 April 2014
Emerging Technologies in Smart Grid	Dept. of Electrical Engg., K. K. Wagh Inst. of Engg. Edu. & Research, Nashik	Nashik	Three Days	17-19 Dec 2013
SciLab and Its Application to Global Optimization and Fractional Differential Equations	Indian Institute of Technology, Bombay and Instrumentation Department, SGGGS Institute of Engineering and Technology	Nanded	Three Days	23-25 April 2010
Power Quality	Electrical Department, K. K. Wagh I. E. E. & R., Nashik	Nashik	Three Days	31 Dec 09 -01 Jan 10
Internet of Things (IoT) India Congress	Institute of Engineering and Technology (IET) India IoT Panel	Bangalore	Two Days	7-8 Sept 2016
Simulation of Power Electronics Circuits	Electronics Department, K. K. W. I. E. E. & R., Nashik in Association with IIT Bombay	Nashik	Two Days	23-24 January 2016
Overviews, Applications, and Designing of Solar PV Systems	Electrical Department, K. K. W. I. E. E. & R., Nashik in Association with IET Nashik LN	Nashik	Two Days	21-22 January 2016
Community Volunteer Conference 2015	IET India	Lonavala	Two Days	4-5 October 2015
MISSION 10X Faculty Empowerment Workshop	Dale Carnegie & Associates, Inc. Trainer & Wipro hosted by K. K. Wagh I. E. E.& R.	Nashik	Two Days	9-10 Aug 2010
Best Practices in Engineering Education and Total Quality Control	MET's Institute of Engineering	Nashik	Two Days	5-6 Feb 2010
Static TOD Meters	Office of Chief Engineer, Training Research and Development, Eklahare	Nashik	Two Days	27-28 June 2007
Internet of Things	IET Nashik Local Network	Nashik	One Day	19 March 2016
Energy Audit of AG Pumps	RIT Islampur in Association with IIT Bombay	Islampur	One Day	27 Feb 2016
MATLAB Applications in Electrical Engineering	K. K. Wagh I. E. E. & R., Nashik in Association with IET Nashik Local Network	Nashik	One Day	3 August 2015
Research Methodology	Sandip Foundation	Nashik	One Day	24 Dec 2011
Digital Signal Processing and Processors	S.S.V.P.S.'s Bapusaheb Shivajirao Deore College of Engineering & Polytechnic,	Dhule	One Day	17 July 2008
National Instruments LabVIEW & Data Acquisition	National Instruments	Nashik	Half Day	10 May 2016

## Personal Information

- ✓ **Date of Birth:** 17 November 1983. (Age: 37 Years)
- ✓ **Marital Status:** Married
- ✓ **Languages:** Good command of English, Hindi, and Marathi.
- ✓ **Nationality** Indian
- ✓ **Gender** Male

**Place:** Nashik, India

**Ravindra Munje**