

Resume

Dr. Pramod J. Patil
Ph.D. Mathematics [SET]

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1. Personal Details

Name : Dr. Pramod Jagannath Patil
Gender : Male
Birth Date : September 13, 1982
Marital Status : Married
Religion : Hindu
Cast : Maratha
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Salokhenagar, Kolhapur. Pin 416007

2. Educational Qualifications

Examination	Year of Passing	University/Board	Percentage of Marks	Class Obtained
Ph.D. (Mathematics)	April-2012	Indian Institute of Technology, Bombay, Mumbai
M.Sc (Mathematics)	April 2005	University of Mumbai, Mumbai	71.1%	First Class with Distinction
B.Sc. (Mathematics)	May 2003	Pune University, Pune	79 %	Pass Class
H.S.C	Feb- 2000	Kolhapur Divisional Board	87.17 %	First Class with Distinction
S.S.C.	March 1998	Kolhapur Divisional Board	83.46%	First class with Distinction

3. Academic achievements and Scholarships

- Awarded with NBHM (National Board for Higher Mathematics) Research Scholarship during 2006-2012.
- Qualified UGC-SET (Maharashtra State Eligibility Test) in Feb. 2005.
- Recipient of Dhirubhai Ambani Undergraduate scholarship during academic years 2000-2003
- Recipient of Shivaji University Merit scholarship during academic years 2000-2002
- Secured the First position in the Physically handicapped category in HSC examination under Kolhapur Divisional board.

4. Research Area of Interest

- Operator Theory

5. Title of Doctoral Thesis

On Certain Subnormal Weighted Shifts and Their Duals

6. Teaching Experience

- 1) Worked as a Teaching Assistant at IIT Bombay during the period of Ph.D.
- 2) Worked as a Visiting Faculty at the Centre for Excellence in Basic Sciences, Mumbai during January 2012 to April 2012.
- 3) Worked as an Assistant Professor at MIT College of Engineering, Kothrud, Pune during August 2012 to May 2014.
- 4) Working as an Assistant Professor for Mathematics at the School of Nano-science and Technology from June 2nd 2014 till this date
- 5) Worked as a Visiting Faculty at the Department of Mathematics, Shivaji University, Kolhapur during July 2015 to October 2015

7. Subjects Taught

- Basic Topology at Centre for Excellence in Basic Sciences, Mumbai
- Engineering Mathematics I and II at MIT College of Engineering, Pune
- Differential and Integral Calculus at the School of Nanoscience and Technology
- Linear Algebra at the Department of Mathematics, Shivaji University, Kolhapur
- Recent Trends in Mathematics (For Pre Ph.D./M.Phil. students) at Department of Mathematics, Shivaji University, Kolhapur

8. Workshop / Seminars Attended

- 1) Attended Two week Refresher course in Managing Online Classes & Co-creating MOOCS 23.0, organized by Teaching Learning Center, Ramanujan College, University of Delhi
- 2) Attended Two week Refresher course in Applicable Mathematic during 15th December 2021 to 29th December 2021 organized by Teaching Learning Center, Ramanujan College, University of Delhi
- 3) Attended an Instructional School for Teachers on Analytic Number Theory during 2nd December 2019 to 14th December 2019 at IISER-Berhampur, Odisha.
- 4) Attended National workshop in Linear Algebra and its Applications during 28th February to 5th March 2018 at the Department of Mathematics, Shivaji University Kolhapur
- 5) Attended Special winter School in Computational Mathematics organized by UGC-HRDC, Savitribai Pune University in Nov 2017.
- 6) Participated in the Orientation programme at the Academic staff college Pune during 1st June 2016 to 28th June 2016.
- 7) Attended National Conference on Differential Equations-2015 during 29th and 30th January 2015 at the Department of Mathematics, Shivaji University Kolhapur.
- 8) Participated in Teacher Orientation Programme organized by Dept. of Education, Shivaji University, Kolhapur, 2nd and 3rd September, 2014.
- 9) Attended one day workshop on Mathematics II organized by University of Pune in December 2012
- 10) Attended the Advanced Instructional School on Operator Theory at Indian Statistical Institute, Bangalore in May 2007
- 11) Attended the Advanced Training in Mathematics on Functional and Harmonic Analysis at Indian Statistical Institute, Bangalore in May 2006
- 12) Attended the Advanced Instructional School on Commutative Algebra and Algebraic Geometry at Indian Institute of Technology Bombay, Mumbai in December 2005
- 13) Attended Advanced Foundation School (AFSII) at Bhaskaracharya Pratishthan and University of Pune in December 2004
- 14) Attended Mathematics Training and Talent Search(MT&TS) at RIE Mysore in May 2003

9. Research Publications

- 1) On the duals of Szego and Cauchy Tuples, Proceedings of AMS,139,(2011), 491-498 (With Prof. Ameer Athavale)
- 2) On Certain Multivariable Subnormal weighted Shifts and their duals, Canadian Mathematical Bulletin 56(2013) 459-465 (With Prof. Ameer Athavale)
- 3) Piecewise Linear and Nonlinear Window Functions for Modelling of Nanostructured Memristor Device, Journal of Nano-And Electronic Physics, Vol. 7 No 3, 03012 (4pp) (2015) (With T.D. Dongale, K.P. Patil, S.B. Mullani, K.V. More, S.D. Delekar, P.K. Gaikwad, R.K. Kamat)
- 4) TiO₂ based nanostructured memristor for RRAM and neuromorphic applications: a simulation approach, Nano Convergence 3 (1), 1-7 (2016) (With T. D. Dongale, NK Desai, PP Chougule, SM Kumbhar, PP Waifalkar, PB Patil, RS Vhatkar, MV Takale, PK Gaikwad, R K Kamat)
- 5) Effect of Conductive Filament Temperature on ZrO₂ based Resistive Random Access Memory Devices, JOURNAL OF NANO- AND ELECTRONIC PHYSICS, Vol. 12, No. 2, (2020) (With N A Ahir, S Yadav, C C Revadekar, K V Khot, R K Kamat, T D Dongale, Deok-kee Kim)

- 6) Machine learning-assisted design guidelines and performance prediction of CMOS-compatible metal oxide-based resistive switching memory devices, Applied Materials Today 29, 101650 (2022) (With Tukaram D Dongale, Santosh S Sutar, Yogesh D Dange, Atul C Khot, Somnath S Kundale, Swapnil R Patil, Shubham V Patil, Aditya A Patil, Sagar S Khot, Jinho Bae, Rajanish K Kamat, Tae Geun Kim)
- 7) Investigations on resistive switching effect and time series statistical analysis of solution combustion synthesized ZnTiO₃ memristive device, Journal of Materials Science: Materials in Electronics 33 (30), 23390-23403 (With Akhilesh P Patil, Chetan C Revadekar, Girish U Kamble, Somnath S Kundale, Sunil J Kadam, Santosh S Sutar, Tukaram D Dongale)
- 8) Unraveling the importance of fabrication parameters of copper oxide-based resistive switching memory devices by machine learning techniques, Scientific Reports 13 (1), 4905 (2023) (With Suvama M Patil, Somnath S Kundale, Santosh S Sutar, Aviraj M Teli, Sonali A Bekenkar, Rajanish K Kamat, Jinho Bae, Jae Cheol Shin, Tukaram D Dongale)

10. Invited Lectures/Seminars

- 1) Dilivered 2 Lectures on 'Complex Analysis and its applications' in the UGC-NET coaching classes for students of M.Sc. Physics at the Department of Physics, Shivaji University, Kolhapur.(1st March 2015)
- 2) Delivered a guest lecture on Science and Indian culture at Anandibi Raorane college of Arts, Commerce and Science at Vaibhavwadi, Dist. Sindhudurg, Maharashtra. (5th March 2015)
- 3) Conducted a session on importance of meditation and breathing techniques for the faculty members of Anandibi Raorane college of Arts, Commerce and Science at Vaibhavwadi, Dist. Sindhudurg, Maharashtra. (5th March 2015)
- 4) Conducted a session for M.Sc. students on Indian culture and importance of meditation at the Department of Physics, Shivaji University, Kolhapur. (3rd April 2015)
- 5) Gave a guest lecture on Stress Management to the M.Sc. II students of the Department of Botany, Shivaji University, Kolhapur. (18th December 2015)
- 6) Dilivered 5 lectures on Stress Management and Real Analysis in the UGC-NET coaching classes for students of M.Sc. Statistics at the Department of Statistics, Shivaji University, Kolhapur.(7-15 January 2016)
- 7) Dilivered 4 lectures on Real Analysis in the UGC-NET coaching classes for students of M.Sc. Statistics at the Department of Statistics, Shivaji University, Kolhapur.(14-15 December 2016)
- 8) Conducted 6 lectures for M.Sc. I students of the School of Nanoscience and Technology giving emphasize on 'Personality Development' and ancient Indian culture under the Remedial lecture series. (15-20 January 2017)
- 9) Conducted Course on Human Values for the students in Shivaji University with 20 sessions of 1.5 hours each. (March 2019)
- 10) Conducted Free Online Course on Human Values for the students in various Universities in Maharashtra with 15 sessions of 1 hours each. (May-June 2020)
- 11) Conducted workshop on Stress Management and Human Values under STRIDE Component 1 (17-20 August, 2020)
- 12) Conducted Course on Human Values for the students in Shivaji University with 20 sessions of 1.5 hours each. (11th October 2022 to 8th December 2022)

11. Extra-Curricular Activities

- Took part in the Art of Living activities during Oct 2006 to April 2009 at IIT Bombay
- Worked as a volunteer during World Culture Festival at Berlin in July 2011
- Worked as a volunteer at Sri Sri Ravishankar Vidya Mandir, Dharavi, Mumbai
- Currently giving services as an Art of Living Teacher conducting the Art of Living Happiness workshops.
- Conducted three courses on Human Values and Stress Management for the Students of Shivaji University, Kolhapur.