Curriculum Vitae (CV)

Dr. Jayvant Balavant Patade
M. Sc., Ph. D., Post-doc.
Assistant Professor,
Department of Mathematics,
Jaysingpur College, Jaysingpur
Kolhapur- 416101, Maharashtra.
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Educational Qualification:

- **Post-doctoral** (Mathematics) (11/01/2020)
  Awarded Postdoctoral Fellowship of Savitribai Phule Pune University (SPPU-PDF), Department of Mathematics, Savitribai Phule Pune University (SPPU).
  Advisor: Prof. Dr. Varsha Gejji
  Title of Project: Analysis of novel special functions arising from the solutions of delay differential equations.

- **Doctor of Philosophy** (Mathematics) (29/03/2017)
  Department of Mathematics, Shivaji University, Kolhapur, India.
  Advisor: Dr. Sachinkumar Bhalekar
  Title of Thesis: Solving Nonlinear Systems of Differential Equations Using Iterative Methods

- **Master of Science** (Mathematics) (2011-2013)
  Department of Mathematics, Shivaji University, Kolhapur
  Class: **First Class with Distinction** (74.38%)

- **Bachelor of Science** (Mathematics) (2008-2009)
  Shivaji University, Kolhapur
  Class: **First Class** (69.60%)

Mathematical Software's:

- Mathematica
- LaTeX
- Scilab
- GeoGebra

Research Experience:

- Working as **Ph. D. guide in Mathematics** at Dr. Babasaheb Ambedkar Technological University (The State Government University) Maharashtra –Lonere -402103.
- Worked as Junior Research Fellow under National Board for Higher Mathematics (NBHM) research project in the Department of Mathematics, Shivaji University Kolhapur from 04 April 2014 to 15 January 2015.
- Worked as Senior Research Fellow under National Board for Higher Mathematics (NBHM) research project the Department of Mathematics, Shivaji University Kolhapur from 16 January 2015 to 15 January 2017.
- Worked as Postdoctoral Fellow in the Department of Mathematics, Savitribai Phule Pune University (SPPU).

Research:

- **Area of Interest:** Differential Equations, Fractional Calculus, Delay Differential Equations, Partial Differential Equations, Numerical methods, Special Function, Iterative methods.
- **H-index: 6**
- **i10-index: 5**
- **Google Scholar Citations: 100**
- **Research Gate Citations: 104**
- **RG Score: 5.53**
- **ORCID iD: 0000-0002-3334-0402**
  https://orcid.org/0000-0002-3334-0402

- **Web of Science Researcher ID: AAO-1830-2020**
  https://publons.com/researcher/3638307/dr-jayvant-patade
- **Scopus Author ID: 56644715000**
  https://www.scopus.com/authid/detail.uri?origin=AuthorProfile&authorId=56644715000&zone=
- **Google Scholar profile:**
  https://scholar.google.co.in/citations?user=-lc7TPsAAAAJ&hl=en&oi=ao
- **Research Gate profile:**
  https://www.researchgate.net/profile/Jayvant_Patade3

Membership/Other Charge:

- Editorial Board Member for the international journal "**Expert Opinion on Astronomy and Astrophysics" (EOAA). ISSN: 2529-7813 (Online).**
  http://ojs.whioce.com/index.php/eoaa/about/editorialTeam
- Editorial Board Member for the international journal **"Applied and Computational Mathematics" (ACM). ISSN Online: 2328-5613.**
  http://www.sciencepublishinggroup.com/journal/editorialboard?journalid=147
- Editorial Board Member for the international journal **"SCIREA Journal of Mathematics".**
  http://www.scirea.org/journal/EditorialBoard?JournalID=11000#4591
- Member of **"Society for Special Functions and Applications".**
- **Reviewer** for the International Journals:

1. Mathematical Modelling and Analysis (Taylor & Francis)
2. Journal of Astrophysics and Astronomy (Springer)
3. Applied and Computational Mathematics (ACM).
4. American Journal of Computational and Applied Mathematics (AJCM), etc.

- Worked as subject **chairman/paper setter** in various Universities.

Teaching Experience:

- Worked as Assistant Professor in Mathematics at Tatyasaheb Kore Institute of Technology, Warnanagar from 01 Aug 2013 to 31 January 2014.
- Worked as Assistant Professor in Mathematics at Ashokrao Mane group of Institution, Vathar, Kolhapur from 02 July 2017 to 31 December 2019.
- Working as Assistant Professor in Mathematics at Department of Mathematics, Jaysingpur College, Jaysingpur, Kolhapur from 03 May 2020 to till date.

Publications:

1. **J. Patade**, S. Bhalekar, On Analytical Solution of Ambartsumian Equation. National Academy Science Letters – Springer, 2017 40(4): 291-293.
   Indexed in: Science Citation Index (SCI), Web of Science, SCOPUS, Zentralblatt Math., Mathematical Reviews, Google Scholar and so on
   Impact Factor is 0.416 (Thomson Reuter Agency Journal Citation Report - 2019).

2. S. Bhalekar, **J. Patade,** Analytical solutions of nonlinear equations with proportional delays, Applied and Computational Mathematics 2016 15(3):331-345,
   Indexed in: Science Citation Index (SCI), Web of Science, SCOPUS, Zentralblatt Math., Mathematical Reviews, Google Scholar and so on
   Impact Factor is 3.16(Thomson Reuter Agency Journal Citation Report - 2018).

3. **J. Patade**, S. Bhalekar, Approximate analytical solutions of Newell-Whitehead-Segel equation using a new iterative method. World Journal of Modelling and Simulation**.** 2015 11(2):94-103.
   Indexed in: Scopus, Zentralblatt MATH, Google Scholar etc.

4. **J. Patade**, S. Bhalekar, A new numerical method based on Daftardar-Gejji and Jafari technique for solving differential

Equations. World Journal of Modelling and Simulation. 2015 11(4):256--271**.**
Indexed in: Scopus, Zentralblatt MATH, Google Scholar etc.

5. J. Patade, S. Bhalekar, Analytical Solution of Pantograph Equation with Incommensurate Delay. *Physical Sciences Reviews* 2017 2(9).
Indexed in: Web of Science, Scopus, Google Scholar and so on.

6. S. Bhalekar, **J. Patade,** Series Solution of the Pantograph Equation and Its Properties. *Fractal Fract* **2017**, *1*(1).
Indexed in: Web of Science, Google Scholar and so on.

7. S. Bhalekar, **J. Patade,** An Analytical Solution of Fisher's Equation Using Decomposition Method. American Journal of Computational and Applied Mathematics. **2016** 6(3):123-127.
Indexed in: Zentralblatt MATH, Google Scholar etc.

8. S. Bhalekar, **J. Patade,** A Novel Numerical Method for Solving Volterra Integro-Differential Equation. Int. J. Appl. Comput. Math. **2020** 6(1) :1-19.
Indexed in: Scopus, Zentralblatt MATH, Google Scholar etc.

9. S. Bhalekar, **J. Patade,** Novel Special Function Obtained from a Delay Differential Equation. (Communicated), **arXivpreprint: arXiv:1608.03959v1 [math.CA].**

10. J. Patade, S. Bhalekar, Numerical solutions of stiff systems by using new numerical method, Malaya Journal of Matematik. 2019 1: 652-655.
Indexed in: Zentralblatt MATH, Google Scholar etc

11. J. Patade, S. Bhalekar, A new class of special functions arising from the solution of differential equations involving multiple proportional delays. (Communicated) **arXivpreprint:arXiv:1902.03405v1 [math.DS].**

12. J. Patade, S. Bhalekar, Modified DJ method: Application to Boussinesq equation. (Communicated)**arXiv:2007.09986**

Book Chapters:

The following chapter published in an International edited books:

1. **J. Patade**, S. Bhalekar, Analytical Solution of Pantograph Equation with Incommensurate Delay, In book: **Computational Sciences**, Edition: 1, Publisher: De Gruyter, Editor: Ponnadurai Ramasami-September 2017.

2. S. Bhalekar, **J. Patade,** Series Solution of the Pantograph Equation and Its Properties, In book: **The Craft of Fractional Modelling in Science and Engineering**. Publisher: *FractalFract, Editor*: Jordan Hristov-May 2018.

Papers Presented in Conference/Seminar:

1) **J. Patade**, S. Bhalekar, "Approximate Analytical Solutions of Nonlinear ODEs Using New Iterative Method", International Conference on Emerging Trends in Mathematical Sciences (ICETMS-2014) at Department of studies in mathematics, Vijayanagara Sri Krishnadevaraya University, Bellary, Karnataka from July 25-26, 2014.

2) **J. Patade**, S. Bhalekar, "New Numerical Method for Solving Differential Equations", Avishkar research project competition on 24 December 2014.

3) **J. Patade**, S. Bhalekar, "An analytical solution of Fisher's equation using new iterative method ", Two-day state level seminar on Applications of advanced Mathematics and Research Methodologies Sciences during 16-17 October, 2014.

4) **J. Patade**, S. Bhalekar, Solving the Kuramoto-Sivashinsky Equation Using New Iterative Method", National Conference on Differential Equations-2015 (NCDE-2015) to be held during 29-30 January 2015 at Department of Mathematics Shivaji University, Kolhapur.

5) **J Patade.** "Numerical solutions of stiff systems by using new numerical method", International conference on Mathematical

Sciences-2015 (MSC-2015) during 15-16 September 2015 at Sadguru Gadage Maharaj College, Karad.

6) **J. Patade**, S. Bhalekar, "An analytical solution of Fisher's equation using Daftardar-Gejji and Jafari Method", Avishkar research project competition on 18 December 2015.

7) **J. Patade**, S. Bhalekar, "Numerical Solutions of Lotka-Volterra Model", National Seminar on Differential Equation and Dynamical System - 2017 to be held during 27-28 February 2017 at Department of Mathematics Shivaji University, Kolhapur.

8) **J. Patade,** "Analytical Solution of Fractional Differential Equation with Proportional delay", National Conference on Fractional Calculus & Fractional Differential Equations to be held during 06-08 November 2017 at Department of Mathematics, Savitribai Phule Pune University, Pune.

9) **J. Patade**, S. Bhalekar, "Analysis of Series Solution of Pantograph Equation with Multiple Delays", National Conference on Advances in Differential Equations-2018 to be held on September, 2018 at Vivekanand College, Kolhapur.

10) **J. Patade,** "A new class of special functions arising from the solution of differential equations involving multiple proportional delays" International Conference on Special Functions & Applications (ICSFA-2018) was held at Amal Jyothi College of Engineering, Kanjirappally, Kerala during 22-24 November 2018.

11) **J. Patade,** "On Analytical Solution of System of Fractional Order Ambartsumian Equations" Online International Conference on Mathematical Techniques and Applications be held on 13 June 2020 at LNCT Group of College Bhopal.

12) **J. Patade**, S. Bhalekar, "Modified DJ method: Application to Boussinesq equation" 3rd International Conference on Mathematical Modelling, Applied Analysis and Computation (ICMMAAC-2020) held at JECRC University, Jaipur, India, August 7-9, 2020.

Workshops/FDP/Webinar:

1. Measure Theory- July 29-August 3, 2014 at Department of Mathematics, Savitribai Phule Pune University.

2. Soft Computing Techniques for Modeling and Optimization in Mechanical Engineering, 13/03/2019 to 15/03/2019, Ashokrao Mane group of Institution, Vathar.

3. Online Faculty development program on LaTex organized by Department of Civil Engineering, RMD Sinhgad School of Engineering, Warje from 28th April to 2nd May 2020 in association with Spoken Tutorial Project, IIT Bombay, Funded by National Mission on Education through ICT, MHRD, Govt. of India.

4. Online One Week Faculty Development Program in association with Spoken Tutorial IIT- Bombay. An initiative of National Mission on Education through ICT, MHRD, Govt. of India organized by Willingdon College, Sangli from 23 /05/2020 to 29/05/2020.

5. Online Faculty Development Program "Fuzzy Sets and Systems" held on 16th May 2020 organized by Patrician College of Arts and Science, Chennai.

6. National Webinar on "Online Educational Tools: A Miracle for Effective Teaching" on 23rd May 2020 organized by Kamala College, Kolhapur.

7. Online Induction Training/Orientation Programme for Faculty in Universities/Colleges/Institutes of Higher Education from 04th June to 01st July, 2020 organized by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

8. Two Week Online Faculty Development Programme On Managing Online Classes and Co-Creating Moocs 3.0 from 25th July to 10th August, 2020 organized by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Teaching Learning Centre Ramanujan College (University of Delhi).

Declaration: I hereby declare that the information given is true as per my knowledge and belief.

Dr. Jayvant Patade