

CURRICULUM VITAE

Dr. Kailash Yadav

Department of Mathematics,
Hindustan Institute of Technology and Science,
Padur, Chennai, Tamilnadu, India

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OBJECTIVE

To build a career through hard work and dedication in an organization which will provide an environment to utilize my skills and realize my potential.

ACADEMICS

Area of research : Numerical Analysis

Area of Interest : (1) Numerical Analysis in ODE, PDE & IE
(2) Operation Research

Name of the Institution : Maulana Azad National Institute of Technology
Bhopal (M.P.)

Session : 2014-2021

Ph. D. (Maths):

Specialization : Mathematics
Board / University : Maulana Azad National Institute of Technology
Name of the Institution : Maulana Azad National Institute of Technology
Year of Passing : **October 2021**
Results : 80.05%

M.Sc. (Maths):

Specialization : Industrial Mathematics and Informatics
Board / University : Indian Institute of Technology (IIT) Roorkee
Name of the Institution : IIT Roorkee
Year of Passing : **June 2012**
Results : 59.6%

B.Sc. (Maths):

Specialization : Mathematics
Board / University : Gujarat University
Name of the Institution : St. Xavier College Ahmedabad.
Year of Passing : **June 2010**
Results : 70.76%

Higher Secondary Examination:

Board / University : U.P. Board
Name of the Institution : Janta Inter College Babhnauli Ghazipur
Year of Passing : **May 2006**
Results : 65.20%

High School Examination:

Board / University : U.P. Board
Name of the Institution : Janta I C Babhnauli Rampur Ghazipur
Year of Passing : May 2004
Results : 57.83%

SKILL:

Core Skill : Numerical Analysis & Operation Research

Exam Qualified: IITJAM(2010), GATE(2013)

Paper Presented in National/International Conferences during Ph.D.:

(1) **Kailash Yadav and J.P. Jaiswal**, "Solution of Class of Fourth Order Singular Perturbed boundary value problems by Haar wavelets method" National Conference "National Level Conference on Current Scenario in Pure and Applied Mathematics" (December 22-23, 2016), Organized By Department of Mathematics, PG & Research Department of Mathematics Kongunadu Arts and Science College, Coimbatore (Tamil Nadu).

(2) **Kailash Yadav and J.P. Jaiswal**, "A Comparative Study of Approximate Solution of Fifth-Order Boundary-Value Problems by Applying Haar wavelets Technique and Galerkin method with Quartic B-Splines" "M.P. Young Scientist Congress" (March 10-11, 2017), Organized By M.P. Council of Science and Technology Vigyan Bhawan, Nehru Nagar, Bhopal-462003.

(3) **Kailash Yadav and J.P. Jaiswal**, "On the Operational matrix for fractional integration and its application for solving Abel integral equation using Bernoulli wavelet" International Conference "International Conference on Current Trends in Theoretical and Computational Differential Equations with Applications" (December 01-05, 2017), Organized By Department of Mathematics, South Asian University, New Delhi.

(4) Kailash Yadav and J.P. Jaiswal, "A Comparative Study of Approximate Solution of Fifth-Order Boundary-Value Problems by Applying Haar wavelets Technique and Galerkin method with Quartic B-Splines" "Research Scholars' Day" (January 21, 2018), Organized By Maulana Azad National Institute of Technology Bhopal (M.P.).

(5) Kailash Yadav and J.P. Jaiswal, "A Comparative Study of Approximate Solution of Fifth-Order Boundary-Value Problems by Applying Haar wavelets Technique and Galerkin method with Quartic B-Splines" "Prof. P. C. Vaidya National Conference on Mathematical Science" (December 24-25, 2018), Organized By Department of Mathematics, St. Xavier's College, Ahmedabad & Gujarat Ganit Mandal (GGM).

(6) Conference/Seminars/Workshop Participation/Summer Internship:

(1) Mathematics Training and Talent Search Programme (Funded by NBHM), R.I.E, Mysore, (May 19-June 14, 2008).

(2) Prof. A. R. Rao. Mathematics Competition-2008 Ahmedabad Ganit Mandal, R.I.E, Mysore, (September 03, 2008).

(3) Summer training. Sahajanand laser Technology LTD. Gandhinagar Gujarat, (May 31th -14th July, 2011).

(4) One week Term Training Programme on Numerical Methods in Engineering and Science, Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat), (January 01-05, 2014).

(5) TEQIP-II sponsored One Week Short Term Training Programme on Mathematical, Statistical, Operation Research based Modeling and Simulation for Researchers, Engineers and Scientists, Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat), (January 27-31, 2014).

- (6) Short Course on Computational Technique for Scientific & Engineering Problems, Maulana Azad National Institute of Technology, Bhopal, (May 18-22, 2015).
- (7) Short Term Training Program on Symbolic Computing and Numerical Programming Using Mathematica/Matlab, National Institute of Technology, Warangal, (July 10-12, 2015).
- (8) Short Term Training Program on Hands on Big data with Hadoop, Organized by Maulana Azad National Institute of Technology Bhopal, M.P. (November 01-05, 2015).
- (9) 18th Annual Cum 1st International Conference of Vijnana Parishad of India on Computational and Integrative Science & International Symposium on Computational Biology, Organized by Maulana Azad National Institute of Technology Bhopal, M.P. (December 11-14, 2015).
- (10) National Level Conference on Current Scenario in Pure and Applied Mathematics, Organized By Department of Mathematics, PG & Research Department of Mathematics Kongunadu Arts and Science College, Coimbatore (Tamil Nadu) (December 22-23, 2016).
- (11) "M.P. Young Scientist Congress", Organized By M.P. Council of Science and Technology Vigyan Bhawan, Nehru Nagar, Bhopal, (M.P.) (March 10-11, 2017)
- (12) Participated in the course on "Nonlinear Analysis and Its Application to Optimization Techniques" under the auspices of Professional Development Programme Organized By Indian Institute of Technology (Indian School of Mines), Dhanbad (August 18-22, 2017)
- (13) International Conference "International Conference on Current Trends in Theoretical and Computational Differential Equations with Applications" Organized By Department of Mathematics, South Asian University, New Delhi (December 01-05, 2017).

(14) Kailash Yadav and J.P. Jaiswal, "A Comparative Study of Approximate Solution of Fifth-Order Boundary-Value Problems by Applying Haar wavelets Technique and Galerkin method with Quartic B-Splines" "Research Scholars' Day" (January 21, 2018), Organized By Maulana Azad National Institute of Technology Bhopal (M.P.).

(15) Kailash Yadav and J.P. Jaiswal, "A Comparative Study of Approximate Solution of Fifth-Order Boundary-Value Problems by Applying Haar wavelets Technique and Galerkin method with Quartic B-Splines" "Prof. P. C. Vaidya National Conference on Mathematical Science" (December 24-25, 2018), Organized By Department of Mathematics, St. Xavier's College, Ahmedabad & Gujarat Ganit Mandal (GGM).

(16) International workshop on "Wavelets and its Applications: Image Processing, Data Science and PDE" organized by the department of mathematics, Manav Rachna University, Faridabad, India in collaboration with department of mathematics, IIT Indore, Indore India from December 06-10, 2021.

(17) "Conference on Mathematical Sciences and Applications in Engineering (CMSAE-2021)" organized by the department of mathematics, Hindustan Institute of Technology and Science (HITS), Chennai-603103 India during 9-10 December 2021.

(18) The short-term course on "Nonlinear Problems in Hydroelasticity" organized by the department of mathematics, Indian Institute of Technology Kharagpur, Kharagpur India from December 13 to December 17, 2021.

(19) Five Day Online Short Term Course on "Introduction to Mathematica" organized by the department of mathematics, National Institute of Technology Manipur Langol, Manipur Imphal, Indore India from December 27-31, 2021.

Publications in National/ International Journal during Ph.D.:

(1) Kailash Yadav and J.P. Jaiswal, "Solution of Class of Fourth order Singular Perturbed boundary value problems by Haar wavelets method and Quintic B-Spline Method", *The Journal of informatics and Mathematical Sciences (ESCI)*, 9 (2017).

(2) Kailash Yadav and J.P. Jaiswal, "Method for solving Lane-Emden Type Differential equation by coupling of wavelets and Laplace transform", *International journal of Advances in Mathematics (Scopus)*.

(3) Kailash Yadav and J.P. Jaiswal. "On the Operational matrix for fractional integration and its application for solving Abel integral equation using Bernoulli wavelet", *Global journal of pure and applied mathematics (Scopus)*.

(4) Kailash Yadav and J. P. Jaiswal: A Comparative study of numerical solution of pantograph equations using various wavelets techniques , **TWMS Journal of Applied and Engineering Mathematics**, **11(3), 772-788 (2021)**, (Scopus, Emerging Sources Citation Index (ESCI) by Web of Science indexing)

(5) **Kailash Yadav and J. P. Jaiswal**: On the comparative study of numerical solution of fourth-order singularly perturbed boundary-value problem by Haar Wavelets and Initial Value Technique, *Int. J. Adv. Math.*, 2019(4) (2019). (Scopus indexing)

(6) Kailash Yadav: A Comparative Study of Approximate Solution of Fifth-order Boundary-value Problems by Applying Haar Wavelets Technique and Galerkin Method with Quartic B-splines, *International Journal of Difference Equations (IJDE)* 16(1), 59-79 (2021). (Scopus indexing)

TEACHING EXPERIENCE:

1. Institution: Marwadi Education Foundation's Group of Institution Rajkot.
Department: Mathematics
Designation: Teaching Assistant
Duration : 16/07/2012-08/09/2012.
2. Institution: F.D.(Munib) Institute of Engg & Technology
Department: Mathematics
Designation: Lecturer
3. Institution: Maulana Azad National Institute of Technology Bhopal.
Department: Mathematics
Designation: Teaching Assistant
Duration : August, 2014-26th December 2019.
4. Institution: Government of Arts and Science college Bavla Gujarat.
Department: Mathematics
Designation: Assistant Professor Contract Base
Duration : January, 2021-23rd April- 2021.
5. Institution: Hindustan Institute of Technology and Science (HITS)-Chennai.
Department: Mathematics
Designation: Assistant Professor -II
Duration : June, 2021-Till date.

COMPUTER SKILLS:

Programming C and C++, UNIX, Adobe Photoshop, MATLAB, MATHEMATICA, Origin, Latex, Open Office, Microsoft Windows

PERSONAL DETAILS:

Name : Kailash Yadav
Father's Name : Late Nandlal Yadav
Mother Name : Lalmani Devi
Date of Birth : 03/03/1989
Sex : Male
Marital Status : Married
Language Known: Hindi, English
Hobby : Reading Books, Solving Mathematics problem.
Permanent Address: (1) Village- Tarayen, Post-Belehari, Tahsil- Saudpur
Dist.-Ghazipur, Uttar-Pradesh Pin code-233221
&
C-2/14 Gokul Galaxy opp. Kathwada Lake Village
Kathwada Ahmedabad Gujarat Pin code-382430
Present Address : Department of Mathematics Hindustan Institute of
Technology and (Deemed to be University) OMR Road
Chennai Tamilnadu-603103, India

REFERENCES:

Dr. A. Ramesh Babu

Designation: Dean E & T (I Year)

Qualification: B.Sc., M.Sc., M.Tech., M.Phil And Ph.D.

Institute: Hindustan Institute of Technology and Science (Deemed to be University) OMR Road, Chennai Tamil Nadu, India

Research Interest(s): Graph Theory, Cryptography, Network Security, AI & ML.

Email: arbbabu67@gmail.com



Dr. Jai Prakash Jaiswal

Designation: Associate Professor

Qualification: B.Sc., M.Sc. And Ph.D.

Institute: Guru Ghasidas Vishwavidyalaya
(Central University) Bilaspur (C.G.)

Research Interest(s): Numerical Methods,
Numerical Analysis, Numerical Functional
Analysis.

Email: jpbhu2007@gmail.com

**Dr. Udayan Prajapati**

Designation: Associate Professor and Head

Qualification: B.Sc., M.Sc. And Ph.D.

Institute: St. Xavier College Ahmedabad Gujarat

Email: prajapati@sxca.edu.in

**Dr. K.R.Pardasani**

Designation: Professor

Qualification: B.Sc., M.Sc., Ph.D.

Research Area: Computational Biology, Bioinformatics

Institute: Maulana Azad National Institute of Technology
Bhopal

Email: kamalrajp@rediffmail.com

**Dr. Usha Chouhan**

Designation: Associate Professor

Qualification: B.Sc., M.Sc.,
M.Phil., Ph.D.

Research Area: Research Interest:
Biomathematics, Computational Biology &
Bioinformatics, CADD

Institute: Maulana Azad National Institute of Technology
Bhopal

Email: ycchouhan@gmail.com



DECLARATION:

I hereby declare that the above written particulars are best of my knowledge and belief.

With regards

A handwritten signature in blue ink, appearing to read 'Kai', enclosed within a blue oval scribble.

Date:

Kailash Yadav
Place: Bhopal