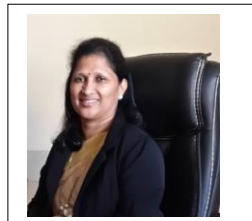## Prof. Varsha Hemant Patil

17, Shreerang Apartment, NDCC Bank Colony,
Laxmi Nagar, Canada corner, College Road, Nashik-422005
Phone: 0253-2406621
E-mail: varsha.patil@matoshri.edu.in

Professional Objective:

To work in a competitive environment, where I can contribute best of my knowledge, experience, and skills to achieve organizational and personal excellence. To undertake interesting and challenging tasks in administration, academics, and research.

Academic Details:

- Doctorate in Computer Engineering from Bharati Vidyapeeth Deemed University, Pune
- Master of Computer Engineering from College of Engineering, Pune (COEP)
- Bachelor of Computer Engineering from Sant Gadge Baba Amaravati University, Amaravati

Employment Details:

Teaching Experience:	**31 Years**
Current Designation	Vice Principal, Professor & Head (Department of Computer Engineering)
Name of Employer:	Matoshri College of Engineering and Research Center, Nashik
Date of Joining: (current institute)	1st August 2009
Earlier Employment Record	19 years of teaching experience as Assistant Professor and Associate Professor at Department of Computer Engineering, K. K. Wagh Institute of Engineering Education and Research, Nashik from 1st August 1990 to 1st August 2009.
PhD Guide	PhD guide at Savitribai Phule Pune University (formerly known as University of Pune) for Computer Engineering. • Degree Awarded - 04 • Registered - 07
Research Interest	Parallel Computing, Soft Computing, Image Processing, and Graph Processing.
PhD Work Title	"Technique for Reconstructing Super Resolution Image using Low Resolution Natural Color Image"
Doctoral Advisor	Dr. Dattatraya S. Bormane, Principal, AISSM College of Engineering, Pune. Currently Chairman, BoS (ETC), SPPU.
Awards:	• Recipient of "Best Teacher Award", Savitribai Phule Pune University, Year 2017 • Recipient of "Significant Contribution Award", Computer Society of India, Nashik Chapter, Year 2015 • Recipient of "Best Maharashtra Engineering Teacher Award" for year 2011 by Engineering Education Foundation, Maharashtra • Recipient of "Engineering Achievement Award" from Institution Engineers (Nashik Chapter) on 18th Oct 2007.

Honors **Board of Studies/ Various Bodies at Affiliated University- Savitribai Phule Pune University (SPPU) / other Universities**	• **Chairman, Board of Studies in Computer Engineering, Savitribai Phule Pune University Since 2018** • Member, Research & Recognition Committee, SPPU since 2017 • Member, Academic Council, SPPU since 2019 • Member, Faculty, SPPU since 2019 • Member, Board of Studies (Computer Engineering), Govt. College of Engineering, Pune since 2019 • Member, Board of Studies (Information Technology), VIIT –Autonomous Institute, Pune since August 2021 **Earlier served as-** • Member, Academic Council, Cummins College of Engineering, (Autonomous College) Pune • Coordinator, Board of Studies in Computer Engineering, University of Pune • Member of Board of Studies in IT Engineering, University of Pune • Member of Board of Studies in Computer Science • Member of Board of Studies in Computer and IT under faculty of Engineering 2004-2005 at North Maharashtra University (NMU), Jalgaon • Member, Board of Studies, Military Engineering, National Defense Academy, Pune • Served as Chairman & Member, Selection Committee, Chairman & Member, Local Inquiry Committee, Member, Examination Committee at SPPU
IPR **(Patent -03)+ Copyright -11)**	**Patents:** 1. Filed Patent "IoT Based Pest Detection System Inside Fruits and Vegetables", Status- **Published**, Application No. 201921005563. 2. Filed patent "System And Method For Motion Analysis And Feedback For Amendment Of Human Action", Status-**Published**, Application No. 201621029482. 3. Filed Patent "IoT Based System For Computing Human Density For Critical Situation Recognition And Precaution For Avoiding Accidents", **Status: Published**, Application No.201721046250 . **Copyrights:** 1. Registered copyright for "Sparse Matrix and Its Efficient Representation ", Registration Number: L-72345/2018, 2. Registered copyright for "A Novel Technique for Reconstruction of Super Resolution Image Reconstruction Using Natural Low Resolution Color Image ", Registration Number-L-70635/2017 3. Registered copyright for "Questionnaire For Study and Analysis of Impact of stress On Health of Employee", Registration Number L-75629/2018, 4. Registered copyright for "The Movie PINK- A message for Society My Opinion ", Registration Number-L-71808/2018 5. Registered copyright for "Research Scholar Handbook ", Registration Number-L-71157/2017 6. Registered copyright for "Project Workbook", Registration Number- L-66962/2017 7. Registered copyright for "Feature Inference Approach for Feature selection Using PSO", Registration Number 54044/2014-CO/L 8. Registered Copyright for "Malware Detection Analysis and Classification of Malware on Android", Registration Number L-66147/2017 9. Registered Copyright for "An Author Publication Information Retrieval Algorithm", Registration Number L-76338/2018 10. Registered copyright for "Development of Novel Algorithm for Analysis and Visualization of Large Graph", Registration Number-L-69172/2017 11. Registered copyright for "An Efficient Partition Building and Cut Set Computing Algorithm (AEPBCCA)", Registration Number-L-77828/2018

Association with Professional Societies (07)	• Professional Member of Association of Computing Machinery • Fellow member of the Institute of Engineers, India IE(I) • Member of the Computer Science Teachers Association (CSTA), Association of Computing Machinery ACM • Life member of Indian Society for Technical Education (ISTE) • Life member of Computer Society of India (CSI) • Member of International Association of Engineers (IAENG) • Life member of Institution of Electronics and Telecommunication Engineers (IETE) • Ex-Student Counselor for student branch associated with CSI Nashik chapter for 2000-02. The student Branch received the "Best Student Branch Award" in Western Region for the year 2001-2002 • Ex-Western Region Student coordinator, Hon. Secretary, Nominations committee Member, Managing committee Member of CSI Nashik chapter.
Association with Research Labs/Conferences and Journals	Served as Convener, member Program Committee, Reviewer and Session Chair for various National and International Journals and Conferences.
Contribution In Curriculum Development	Contribution in curriculum development at UG, PG Engineering and MCA in capacity of Chairman, Member Board of Studies, Computer & IT Engineering, affiliated university and Other institutes and University.
Funded Research Projects: (04)	• Completed Minor Research project as principal investigator titled "Technique for Reconstructing Super Resolution Image using Low Resolution Natural Color Image" under research grant from SPPU, BCUD/578 -2006-08 • Completed Minor Research project as principal investigator "Use of Wireless Sensor Network and GPRS Module for Automated Irrigation System", under research grant of SPPU, BCUD/83 dt-09/03/2014 Grant No: 14ENG000850, 2014-2016. • Completed Minor Research project as co- investigator "Vision Based Human Motion Recognition and Analysis in Indoor Scene for Activity Monitoring using Distributed Data Capture", SPPU, Grant No:14ENG002310, 2015-2017 • Completed Minor Research project as co- investigator "Marathi Handwritten Character Recognition System using Neural Networks", Savitribai Phule Pune University Grant No:14ENG001284, 2016-2018.
Invited Talks	Delivered talk for Teachers & Students at various National & International level seminar, STTP, Workshops and lecture series for Students and Teachers.
NBA Evaluators' Training	Successfully completed 4 Days workshop for "Training & Identification of Master Training on Outcome Based Accreditation (OBA) accreditation Process & Parameters",8th& 15-17th Feb 2014, at Nodal Center- "NMIMS-MPSTME, Mumbai (8 Week)
MOOC/ AICTE FDPs/ Certificate Courses	
FDPs	1. Successfully completed One week Instructor Led Live online training on "Deep Learning using Medical Data", 04-08th Oct 2021. Finland Labs, New Delhi. 2. Successfully completed online QIP short-term course on "Machine Learning Techniques", 21-22 Dec 2020 organized by IIT Roorkee. 3. Successfully completed AICTE Training and Learning (ATAL) Academy online FDP titled "Black Chain", 14-18 Dec 2020 hosted by Bharati Vidyapeeth College of Engineering, Mumbai. 4. Successfully completed AICTE Sponsored online one week FDP on "Block chain and it's" Application", 7-12 Dec 2020, organized by D. Y. Patil CoE, Pune
NPTEL	1. Successfully completed NPTEL online certification- AICTE approved FDP titled "The Joy of Computing with Python" with 92% (among top 2%)
	2. Successfully completed NPTEL online certification- AICTE approved FDP titled "Programming, Data Structures and Algorithms using Python" with 100%
	3. Successfully completed NPTEL online certification- AICTE approved FDP titled "NBA Accreditation and Teaching-Learning in Engineering (NATE)" with 98%
	4. Successfully completed NPTEL online certification- AICTE approved FDP titled "Theory of Computation"

Coursera	1. "Data Visualization" -an online course authorized by University of Illinois at Urbana-Champaign.
	2. "Programming for Everybody" (Getting Started with Python)- an online course authorized by University of Michigan.
	3. "Computer Vision Basics" -an online course authorized by University at Buffalo and The State University of New York.
	4. "Introduction to Data Science in Python"- an online course authorized by University of Michigan.
	5. "Python Programming: A Concise Introduction" -an online course authorized by Wesleyan University.
	6. "Data Science Math Skills" -an online course authorized by Duke University.
	7. "Machine Learning Foundations: A Case Study Approach" -a MOOC from the University of Washington.

- **Conferences/Workshop/Seminars/ STTP attended:**   **38**
- **Conferences/Workshops Organized:**   **25**

Publications:

| Books (02) | ➤ "Discrete Mathematics", International Edition, McGraw Hill,   ISBN-10: 0198066236 ISBN-13: 978-0198066231
 ➤ "Data Structures Using C++", Oxford University Press, ISBN-10: 1259062538 ISBN-13: 978-1259062537
 ➤ Developed a Course Material for "Algorithms" for Engineering Course at WAWASAN Open University, Malaysia, July 2007. |
| Edited Books | ➤ Proceeding of First Doctoral Symposium on Natural Computing Research, DSNCR 2020, Ed. 1, DOI: 10.1007/978-981-33-4073-2, eBook ISBN-978-981-334-073-2, series vol-369, Publisher: Springer Singapore
 ➤ Proceeding of CPGCon 2014 "Post Graduate Computer Engineering Conference" by University of Pune, Volume I-IV, **Elsevier** Publishers, ISBN: 9789351072928 |

Articles at News Paper and Magazine :   08

| Book Chapter (02) | ➤ "Parameter Settings in Particle Swarm Optimization", in Handbook of Research on Soft Computing and Nature-Inspired Algorithms, as coauthor with S M Kamalapur, IGI Global Information Science Reference PP- 101-132 ISSN: 2327-0411; eISSN: 2327-042X, DOI: 10.4018/978-1-5225-2128-0.ch004
 ➤ "Role of Women in Agriculture Sector" in book titled 'Women Welfare and Empowerment in India – Vision for 21st Century', by V.H. Patil and V.R. Khapli, New Century Publication, New Delhi, page number- 485- 490, ISBN: 978-81-7708-172-5 |
| Research Papers (52) | • International Journal =   30
 • International Conference =   16
 • National Conference =   06 |

Publications Indexed at: SCI, Scopus, ACM DL, Compendex (Elsevier Engineering Index)

Web links:

Website	https://engg.matoshri.edu.in/academics/computer
Orchid ID	https://orcid.org/0000-0002-4267-616X
LinkedIn	https://in.linkedin.com/in/varsha-patil-063a4a25
Research Gate	https://www.researchgate.net/profile/Varsha_Patil9
Google Scholar	https://scholar.google.com/citations?user=S8FMucwAAAAJ&hl=en
Scopus	https://www.scopus.com/authid/detail.uri?authorId=14819999400
Vidwan	https://vidwan.inflibnet.ac.in/profile/181275
dblp	https://dblp.org/pid/40/3561.html