

STAFF PROFILE



Dr. Ashwini Tukaram Sapkal

Associate Professor

Information Technology

asapkal@aitpune.edu.in

Date of Joining
01/07/2004

Nature of Appointment
Regular

Educational Details

Qualification	Degree	University	Grade	Year
SSC	Maharashtra State Board Pune	Pune Divisional Board	87.60%	1996
Diploma	Diploma in Computer Engineering	Government Polytechnic Pune	75.93%	1999
Graduation	BE in Computer Science and Engineering	Shree Ramanand Teerth Marathwada University, Nanded	71.18%	2002
PG	ME in Computer Science and Engineering (IT)	Pune University	71.86%	2010
Doctoral	PhD in Computer Science and Engineering	Shree Ramanand Teerth Marathwada University, Nanded		2019

Areas of Interest

Deep learning, Neural Network, Pattern recognition, Machine learning

Experience Details

Total : 22.50 years	Teaching : 17.40 years	Research : 5.10 years	Industry : 0.00 years
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Type	Duration/ Period	Designation/ Organisation Name	Brief Job Profile
Educational	0.50 Years 9th Jan 2003 - 31st March 2003	Visiting Lecturer Government Polytechnique Pune	Taught c, c++ subjects
Educational	16.40 Years 1/04/2003 - 10/10/2019	Assistant Professor Army Institute of Technology Pune	Taught many core subjects such as : Operating systems, System Programming, Object oriented programming. Worked as Senior Supervisor, Cultural Incharge, SPPU Paper setter and NBA Co Coordinator. CSI Student Branch Coordinator of AIT CSI branch.
Research	5.10 Years 4/03/2013 - 15/01/2019	Research Scholar Shree Guru Gobind Singhji Institute of Engineering and Technology, Nanded	I have worked on Backpropagation neural Network Algorithm and proposed two variants of it, namely Noisy Net BP and Magnified Net BP
Educational	0.50 Years 10/10/2019 to tilldate	Associate Professor Army institute of technology, pune	NBA Coordibator, CSI Student Branch Coordinator

Journal Publications

1. Ashwini T Sapkal, (2019). Fast Converging Magnified weighted sum Backpropagation neural network. "Advanced Intelligent Systems and Computing (AISC)" Springer publication. 1(1), 1-8. ISBN/ ISSN No : 2194-5357.

- A T Sapkal, (2018). [Leaf disease diagnosis using online and batch backpropagation](#). *International Journal of Computer Sciences and Engineering*. 6(6), 362-365. ISBN/ ISSN No : 2347-2693. URL : http://www.ijcseonline.org/pdf_paper_view.php?paper_id=2188&.
- Ashwini T Sapkal, (2018). Comparative study of leaf disease diagnosis system using texture features and deep learning features. *International Journal of Applied Engineering Research*. 13(19), 14334-1434. ISBN/ ISSN No : 0973-4562. URL : <https://www.ripublication.com/ijaer18>.
- Ashwini Sapkal, Uday Kulkarni, (2018). [Modified Backpropagation with Added White Gaussian Noise in Weighted Sum for Convergence Improvement](#). *Procedia Computer Science*. 143(0), 309-316. ISBN/ ISSN No : 1877-0509. URL : <https://www.sciencedirect.com/science/article/pii/S1877050918320982>.
- Ashwini Sapkal, V Ingale, (2014). Cryptographic Steganography. *Computer Science & Information Technology*. 1(1), 17-23. ISBN/ ISSN No : 2331-6063.
- Vaishali Ingale, A T Sapkal, (2013). Configuration of Real Time Linux on EP93XX Platform. *International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE)*. 2(10), 3798-3802. ISBN/ ISSN No : 2319-5940. URL : www.ijarcce.com.
- Vaishali Ingale, A T Sapkal, (2013). Kunal Secure Astro-Encryption- Data Encryption and Compression Using Planar Geometry. *International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS)*. 1(1), 119-122. ISBN/ ISSN No : 2279-0047. URL : www.iasir.net
- Vaishali Ingale, A T Sapkal, (2012). Kunal Astro Cryptography security using distance formulae and 3D geometry. *International Journal of IT, Engineering and Applied Sciences Research (IJIEASR)*. 1(2), 31-33. ISBN/ ISSN No : 2319 - 4413. URL : www.irjournals.org.

Conference Publications

- Ashwini T Sapkal, (2019). Fast Converging Magnified weighted sum Backpropagation. *International Conference on Soft Computing and Signal Processing*. 1(1), 27. ISBN/ ISSN No : 2194-5357.
- Ashwini T Sapkal, (2019). Detection of Diabetic Retinopathy using Convolutional Neural Networks. *International Conference on Communication and Information Processing*. 1(1), -. ISBN/ ISSN No : -.
- Ashwini Sapkal, (2018). Ganga Water Quality Monitoring System IoT Based. *IEEE PuneCon 2018*. 1(1), 1-5. ISBN/ ISSN No : 978-1-5386-7278-5 .
- Ashwini Sapkal, (2018). Modified Backpropagation with added white Gaussian noise in weighted sum for convergence improvement. *ICACC 2018*. 143(1), 309-316. ISBN/ ISSN No : 1877-0509.
- Ashwini Sapkal, (2014). SED support for Vmware. *National level CSI Conference*. 1(1), 1-7. ISBN/ ISSN No : na.
- Vaishali Ingale, A T Sapkal, (2014). Cryptographic Steganography. *International Conference on Computer, Communications and Information Technology*. 4(1), 17-23. ISBN/ ISSN No : 2231 - 5403.
- Ashwini Sapkal, (2014). VNC based remote desktop sharing using android phone. *International conference held by IRD in Nagpur ICEECS 2014*. 1(1), 39-43. ISBN/ ISSN No : 978-3-642-24819-9.
- Vaishali J Dharkar, A T Sapkal, (2010). Criminal Location Tracking using AVL Tree on Multi-Relational Database. *Emerging Technologies in Computational and Applied Sciences*. 1(1), 1-4. ISBN/ ISSN No : 1.
- Ashwini Sapkal, (2009). Satellite image classification using the back propagation algorithm of artificial neural network. *Geomatrix 2009*. 1(1), 1-4. ISBN/ ISSN No : na.
- Vaishali J Dharkar, A T Sapkal, (2008). High Bit LSB Method. *Emerging Trends in Information Technology*. 1(1), 1-3. ISBN/ ISSN No : 1.
- Vaishali Dharkar, A T Sapkal, (2007). Self Ranking Algorithm for Mobile Devices using Grid Computation. *National Conference on Advanced Computing & Computer Networks*. 1(1), 1-3. ISBN/ ISSN No : 1.

Books

- Vaishali S Ingale, Ashwini C Bokhare, (2018). *Artificial Intelligence (2015 Pattern) BE E&TC*. Nirali Prakashan. ISBN/ ISSN No : 938819487-X.
- A T Sapkal, (2012). *Distributed operating systems*. Nirali. ISBN/ ISSN No : 938196275-8.
- Vaishali Ingale, Ashwini C Bokhare, (2012). *Artificial Intelligence (2008 Pattern) (COMP)*. Nirali Prakashan. ISBN/ ISSN No : 938244832.
- Vaishali J Dharkar, Ashwini C Bokhare, (2012). *Artificial Intelligence (2008 Pattern) (E&TC)*. Nirali Prakashan. ISBN/ ISSN No : 938196289-8.
- Vaishali J Dharkar, Ashwini C Bokhare, (2011). *Artificial Intelligence (2008 Pattern) (IT)*. Nirali Prakashan. ISBN/ ISSN No : 938159527-5.

Conference

- CSI-Technext 2018 (Attended), Industry - Academia Conference 2018, 2018, IIT Powai
- 4th International conference CCSEIT (Organized), International Conference on Computation Science, Engineering and Information Technology , 2014, AIT Pune

Seminar

1. Current trends in Computer Science Research (Attended), Research opportunities in Computer Science, 2017, MIT Pune

Workshop

1. CSI COnvention 2020 (Attended), Digital Democracy: IT for Change, 2020, Bhubaneswar
2. Mathematical Modelling towards Data Science (Attended), Deep learning and Machine learning, 2019, AIT Pune
3. One week FDP on Data Science (Attended), Pythom programming, Data Science, 2019, Cumminse college Pune
4. Practical Approaches of ANN and Deep learning (Organized), Deep learning hands on , 2018, AIT Pune
5. Deep Learning (Attended), CNN RNN and Transfer learning, 2018, DYP SOE Lohagaon Pune
6. FDP on orientation program for BE IT 2015 Pattern Syllabus (Attended), Business Analytics and Intelligence Subject details of conduction, 2018, JSPM wagholi
7. Revised BE IT(2015 Syllabus orientation (Attended), Conduction of Business Analytics and Intelligence subject, 2018, Bhivarabai Savant Institute of Technology Wagholi
8. Data Science and Machine Learning (Attended), Basics of Data Science Deep Learning , 2018, PCCOE Pune
9. FDP on Probability and Statistics for Machine Learning and Deep Learning (Organized), Probability and Statistics for Machine Learning and Deep Learning, 2017, AIT Pune
10. Basics of Kernel Programming (Organized), system call implementation, 2017, AIT Pune
11. Learner Centric Approach (Attended), Teaching Skill improvement, 2017, 16/06/2017
12. Parallel Computing with Cuda (Attended), NVIDIA GPU and Parallel Programming, 2017, PICT
13. Two Week workshop on Probability and Statistics for Engineers (Attended), Probability and Statistics, 2016, Amethy Univrsity
14. Monte Carlo Simulation of Complex Biological system (Attended), Monte Carlo Simulation, 2016, IIT Powai

Research Grants

Title Of Project	Funding Agency	Duration		Sanctioned Amount	Role of Investigator
Practical approaches of Artificial Neural Network and Deep Learning	SPPU under QIP	17/12/2018	19/12/2018	100000.00	Co-Investigator
Probability and Statistics for Machine learning and Deep learning	SPPU under QIP Research Project	05/12/2017	09/12/2017	100000.00	Co-Investigator

Consultancy

Title Of Project	Funding Agency	Duration	Sanctioned Amount	Investigator Role
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Professional Memberships

Society	Membership No	Duration	
Computer Society of India	N1268328	30/06/2017	30/06/2020
IEEE Student Membership	91188690	02/02/2018	02/02/2019
Indian Society for Technical Education	LM 50621	01/01/2006	30/01/2046

Achievements/ Contribution

Year	Details
2020	Best teacher Award by Army Institute of Technology
2020	CSI Award Paper Presenter at International Conference

2020	CSI Longest Continuous SBC award
2011	Qualified Gate 2011 Exam (91 Percentile)
2006	ME First year University Topper

No of PhD Students Guided : 0 **No of PG Students Guided** : 0
No of PhD Awarded Students : 0