Somaiya Vidyavihar University

Name: **Dr. Suchitra M. Patil**	E-mail: **suchitrapatil@somaiya.edu**
Contact No: 9029401033	
Department/Section: Information Technology Department	
College: K J Somaiya College of Engineering	

DOJ Somaiya: 20/05/2006	Career Experience: 19Yrs	Industry Experience: 0Yrs	Teaching Experience: 19Yrs
Present Academic Designation: (Assistant Professor)		Present Administrative Designation: NA	

Area of research/specialization and Courses Delivered

Research domain/interests/areas
1. Low altitude remote sensing
2. Satellite Image processing
3. Data science
4. Machine learning / Deep learning

Courses Delivered
1. Computer Programming-I (C)
2. Internet Technology and Applications
3. System Software and Operating system
4. System Programming
5. Database Systems/ Database Technologies
6. DLDA
7. Computer Programming-I (C++) and (Java)
8. GUI and DBS
9. Internet Programming
10. Structured Programming approach, Web programming
11. Open-source technologies
12. Data mining and BI
13. Python programming-I
14. Advanced Database
15. Basics of Web Programming
16. Data Modelling
17. Data Modelling and visualization
18. Python programming: A concise introduction.
19. Cyber Laws and Cyber Crime Investigations
20. Security Analysis and Implementation Laboratory I & II
21. Advance Web Technology (AWT)
22. Open-source laboratory II(OSL)
23. Open-source laboratory I
24. Programming Techniques with Shell Scripting

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D.: No
Details of Recognitions 1. Mumbai University			

Education

Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D.	Pursuing Ph.D. (Thesis submitted)	Indian Institute of Technology, Bombay	IITB	-	-
PG	M.E.(Computer)	Mumbai	Thadomal Sahani College	2012	Distinction

			of Engineering, Mumbai		
UG	B.E. (Compute science and engineering)	Vishveshwaraih Technological University, Belgum	Hira Institute of Technology, Nidsoshi, Karnataka	2004	Distinction
Diploma	-	-	-	-	-
NET/SET/Other	-	-	-	-	-

Notable Experience Details					
Sr. No	Name of the Organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	Nil				
2.					

Research Accomplishments and Projects		
No of students pursuing Ph.D as on date:-nil		No of students completed Ph.D as on date:-nil
No of students completed PG thesis / Project work as on date: 03		No of students / groups completed UG projects as on date:35+
Publications Total: 20	Number of Peer review Journal papers:06	Number of Conference papers: 10

Details of Publications:

International Journals

1. Hammouch, H.[†]; Patil, S[†].; Choudhary, S.; El-Yacoubi, M.A.; Masner, J.; Kholová, J.; Anbazhagan, K.; Vanˇek, J.; Qin, H.; Stoˇces, M.; et al. Hybrid-AI and Model Ensembling to Exploit UAV-Based RGB Imagery: An Evaluation of Sorghum Crop's Nitrogen Content. Agriculture 2024, 14, 1682. https://doi.org/10.3390/ agriculture14101682

2. Sheetal Gokhale, Irfan Siddavatam, Ashwini Dalvi, Mohammed Shaikh and Suchitra Patil , "Formal modelling and verification of high interactive honeypot using coloured Petri nets", International Journal of Critical Computer-Based Systems, Vol. 10, No. 3 Published Online:March 3, 2022pp 247 https://doi.org/10.1504/IJCCBS.2022.121365

3. D. H. Kasukurti and S. Patil, "Wearable Device Forensic: probable Case Studies andProposed Methodology", Springer Nature Singapure Pvt Ltd. 2019, S.M.Thampi at al.(Eds.): SSCC 2018, CCIS 969, pp. 1-11,2019.

4. Advait C and Suchitra P., "Simplifying Data Recovery with Advance Techniques and Operations", International Journal of Computer Science And Technology (IJCST), Vol. 7, Iss ue 4,PP. 217-221, Oct - Dec 2016

5. Prof. Suchitra P, Sushant S., Amruta Y. and Rohan S, "Location Based Addvertising", IJRITCC, volume3, issue3, pp.1357-1360, March 2015

6. Prof. Nilkamal More, Prof.Suchitra Patil, "Recommending an Insurance Policy Using Association Rule Mining", International Journal for Innovative Research in Science & Technology, Sept 2014, Issue 1 Volume 4

7. H B Kekre, Tanuja Sarode and Suchitra M Patil. " 2D Image Morphing With Wrapping UsingVector Quantization Based Colour Transition",(IJCSIS)International
Journal of Computer Science and Information Security,Vol.9, No.7 , pp. 75-82, 2011

International/ national Conferences

1. Suchitra Patil, Sunita Choudhary, Jana Kholova, Krithika Anbazhagan, Priyanka Gattu, Srikanth Mallayee, P Rajalakshmi, Magesh Chandramouli, and J Adinarayana. "Can UAV-based field phenotyping minimize human bias in scoring senescence? A case of sorghum" Poster presentation at an international conference on millets, Kochi, Kerala. (July 5 – July 7, 2023).
   Received an award for third place in the poster presentation at this conference

2. S. M. Patil et al., "UAV-based Digital Field Phenotyping for Crop Nitrogen Estimation using RGB Imagery," 2023 IEEE IAS Global Conference on Emerging Technologies (GlobConET), London, United Kingdom, 2023, pp. 1-6, doi: 10.1109/GlobConET56651.2023.10150110.

3. Patil, S., Mehta, J.M., Salunkhe, H.S., Shah, H.V. (2021). Kickstarter Project Success Prediction and Classification Using Multi-layer Perceptron. In: Prateek, M., Singh, T.P., Choudhury, T., Pandey, H.M., Gia Nhu, N. (eds) Proceedings of International Conference onMachine Intelligence and Data Science Applications. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-33-4087-9_60

4. Bhangale, Ujwala, Suchitra Patil, Vaibhav Vishwanath, Parth Thakker, Amey Bansode, and Devesh Navandhar. "Near real-time crowd counting using deep learning approach." Procedia Computer Science 171 (2020): 770-779.

5. Toraskar T., Bhangale U. M., Patil S. M., More N., (2019) Efficient Computer Forensic Analysis Using Machine Learning Approaches, IEEE BOMBAY SECTION SIGNATURE CONFERENCE – IBSSC-2019, IIT Bombay, Victor Menezes Convention Centre (VMCC) | IIT Bombay, July 26-28, 2019

6. Bhangale, Ujwala, Swapnil More, Tanishq Shaikh, Suchitra Patil, and Nilkamal More. "Analysis of Surface Water Resources Using Sentinel-2 Imagery." Procedia Computer Science (2020): 2645-2654.

7. Patil, Suchitra, Ujwala Bhangale, Asha Khatri, Shruti Gudkha, and Riya Savla. "Rapid Flood Detection Using Remote Sensing Images." In 2019 International Conference on Advances in Computing, Communication and Control (ICAC3), pp. 1-6. IEEE,2019.

8. Prof. Suchitra Patil , Tanmay Angre , Hiral Bhanushali , Yash Tank ,"Classification andpam image detection in smartphones", 2nd International Conference on Advances in Science & Technology (ICAST-2019)

9. Suchitra Patil, Ujwala Bhangale, Nilkamal More,"Comparative Study of Color Iris Recognition:DCT vs. Vector Quantization approaches in RGB and HSV Color Spaces", IEEE co-sponsored, International Conference on Advances in Computing, Communications and Informatics (ICACCI), Sept, 2017.

10. H B Kekre, Tanuja Sarode and Suchitra M Patil. "2D Image Morphing using Pixels basedColor Transition Methods", IJCA Proceedings on International Conference and workshop on Emerging Trends in Technology (ICWET) (4):6-13, 2011. Published by
Foundation of Computer Science.

Books and Book chapters

Book Chapters
1. Patil, S.M., Henke, M., Chandramouli, M., Jagarlapudi, A. (2023). Role of Virtual Plants in Digital Agriculture. In: Chaudhary, S., Biradar, C.M., Divakaran, S., Raval, M.S. (eds) Digital Ecosystem for Innovation in Agriculture. Studies in Big Data, vol 121. Springer, Singapore. https://doi.org/10.1007/978-981-99-0577-5_8
2. Patil, S.M., Choudhary, S., Kholova, J., Chandramouli, M., Jagarlapudi, A. (2024). Applications of UAVs: Image-Based Plant Phenotyping. In: Priyadarshan, P.M., Jain, S.M., Penna, S., Al-Khayri, J.M. (eds) Digital Agriculture. Springer, Cham. https://doi.org/10.1007/978-3-031-43548-5_11

Books
3. Analog and Digital Circuits: Nandu Publication Mumbai71
4. Digital Logic Design and Analysis: Nandu Publication Mumbai 71

Patents/Copy Rights: 2 copyrights		
No of Research / consultancy / projects completed:nil Rs:	No of Research / consultancy / projects on-going: Rs:<u>nil</u>	No of Research / consultancy / projects on applied as on date:nil Rs:
Details of Research / consultancy / projects: Completed: nil On-going: one Applied: one On-going project details: Geo-spatial and AI laboratory development Applied for DST project entitiled as "Near Real Time Green Space Monitoring for Flood Mitigation in Smart Urban Planning".		

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered
Attended

1. FDP on satellite data analysis with deep learning and python programing, March 12, 2024 to March 28, 2024, EduxLabs in association with Mechanica IIT Madras.
2. FDP on AWS Cloud Fundamental and Services, March 27, 2024 to March 31, 2024, IT department, SINHGAD INSTITUTE OF TECHNOLOGY, LONAVALA
3. FDS on Gray box probing generative AI, January 8 2024 to Janurary 13, 2024, Fr. CrIT, Vashi, Mumbai.
4. Workshop on Capacity building workshop for early career researchers, March 19, 2024 to March 21, 2024, FSDC, SVU, Mumbai.
5. Attended FDP on "Mentoring Educators in Educational Technology (FDP301x)" by Indian Institute of Technology Bombay, at K. J. Somaiya College of Engineering,Mumbai from May17,2018 to July 05,2018.
6. Attended Two-Day Weekend Training Programme - Saptahaant Shikshak Prashikshan (SSP) on "Introduction toMachine Learning",16-17Dec, 2017.
7. Attended FDP on "Pedagogy for Online and Blended Teaching-Learning Process" by Indian Institute of TechnologyBombay, at K.J. SomaiyaCollege of Engineering, Mumbai from 14 Sep 2017 to 12 Oct 2017.
8. Attended FDP on "FDP101x Foundation Program in ICT for Education" by Indian Institute of Technology Bombay, at K. J. Somaiya College of Engineering, Mumbai from 27 July 2017 to 7 Sep 2017.
9. Completed 4 week online course on "Python Programming- A Concise Introduction", by Wesleyan University on Coursera, 28 June, 2017
10. Attended one week STTP on " High Performance Computing with CUDA, MPI, OPENMP", VIT, Wadala, Feb 2016.
11. Attended two days workshop on "Frameworks",KJSCE, March 2016.
12. Attended two weeks ISTE STTP on "Parallel Processing and Big Data Analytics",SPIT,Andheri, July 2015.
13. Attended Faculty Development Program on "Big Data & Hadoop", J.P. Morgan, Mumbai, Feb 13, 2015
14. Attended Workshop on "Evaluation of open ended activities through Rubrics", KJSCE, Aug 2014
15. Attended Faculty development programme on "Open Source Technologies", TSEC, July 2014.
16. Attended Workshop on "Advanced Engineering OptimizationTechniques", KJSCE, Feb 2014
17. Attended orientation programon "Web Programming",K.C.College of Engineering and Management Studies andResearch,Janurary 2014.

18. Attended one week ISTE graded STTP on "Structured Programming Approach with lab exercises" at SPIT, 31st December 2012 to 5th January 2013.
19. Attended Two days ISTE workshop on "Aakash for Education", organized by IITB and conducted at KJSCE, 10th – 11th November 2012
20. Attended Coordinators' Workshop on Software Development Techniques for Teachers of Engineering and Science Institutes, IITB, September, 2011
21. Attended Faculty development programme on "Research Career Success and Survival Tips", FRCRCE, Bandra, March 2011.
22. Attended International Conference and Workshop on Emerging Trends in Technology (ICWET 2011), Thakur COE, 25th -26th February 2011.
23. Attended one week Short Term Training Programme on " Web Engineering– A practical approach", DBIT, Vidyavihar , May 15- 22, 2009

	21. Attended one week Short Term Training Programme on"Hardware Description Languages for Digital System Design", KJSCE, January 5 -9, 2009. 22. Attended one week seminar and workshop on "Project Management" atK.J.S.C.E., Jan 14 - 18 2008. 23. Attended One day Workshop on IT Trends and Challenges on August 30, 2005.
Organized	1. Co ordinated Hackathon on Python programming , Nov 9,2019 2. Conducted a session on " Introduction to Shell scripting", for MTech (IS) students,Sept 12, 2018 3. Conducted Workshop on " Google Forms", IT Dept., KJSCE, Mar 15, 2014 4. Assisted Workshop on "Database Management System", IITB -KJSCE, 21st-31st 5. May 2013. 6. Co coordinated Workshop on "Software Development Techniques for Teachers of Engineering and Science Institutes", IITB -KJSCE, November 2011
Delivered	1. Delivered a talk on "UAV (unmanned aerial vehicles) enabled image-based high throughput field phenotyping: A Case Study" at one day workshop on "UAVs for Advanced Agricultural Applications" on April 4, 2023 at International Crops Research Institute for Semi-Arid Tropics(ICRISAT), India 2. One day hands on session on HTML and JavaScript for trainees of DRP Global Tech Pvt. LTD on April 28, 2018 3. Delivered as session on "Programming and debugging in GCC", in STTP on" 4. Open source softwares: An effective way of managing engineering education" organized by department of computer engineering, KJSCE. May 2006

Notable Key Scholastic Achievements	
1.	-
2.	

Notable Positions and Responsibility	
1.	Life Member of Indian Society of Technical Education, New Delhi, India, since 2008.
2.	Member of IEEE
3.	IEEE Geoscience and Remote Sensing Society Membership
4.	IEEE Computer Society Membership

Date: 05 /08/ 2024   **Signature of Faculty member**