



DR. MITHUN B. PATIL

MTECH(CSE), PH.D(CS&IS ENGG)

PROFILE

A dynamic professional with a proven track record in academia, specializing in establishing and nurturing departments in Computer Science & Engineering (CSE) and Artificial Intelligence & Data Science (AI&DS). Recognized for receiving prestigious awards like the Best Faculty Award from NKOCET Solapur, the Innovation Award, and the Best Reviewer Award at the ICDSA 2023 International Conference.

In addition to these achievements, my published articles in Scopus and Web of Science-indexed journals attest to my commitment to research excellence. Further, my involvement in patents reflects a dedication to practical innovation.

Driven by a fusion of visionary leadership and academic excellence, my ambition is to further enhance educational progression, spearhead technological advancements, and cultivate dynamic learning ecosystems

CONTACT

Phone:

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EMAIL:

mithunbpatil2@gmail.com

drmithunbpatil@gmail.com

LinkedIn:

www.linkedin.com/in/dr-mithun-b-patil-51377a283.

Google Scholar:

<https://scholar.google.com/citations?user=zP9f0TcAAAAJ&hl=en>.

EDUCATION

- Pursuing Post-Doctoral Research from Singapore Institute of Technology, Singapore (QS rank -429) from April 2024 in Remote Mode.
- Ph.D. in Computer Science & Information Science Engineering from VTU, Belagavi in April 2022.
- MTech (Computer Science & Engineering) with First class with Distinction [8.86 CGPA] from Basaveshwar Engineering College (Autonomous college), Bagalkot, Karnataka in 2011.
- B.E (Computer Science & Engineering) with First class from Dayananda Sagar College of Engineering, Bangalore, Karnataka in 2009.
- SSLC(X) and PUC (XII) with First class from Sharanbasveshwar Residential Public School, Kalaburagi.

WORK EXPERIENCE

- Associate Professor (CSE) & Head of Department - Artificial Intelligence and Data Science NK Orchid College of Engg. & Tech, Solapur | **May 2022 – Present.**
- Assistant Professor - Computer Science and Engg , NK Orchid College of Engg & Technology, Solapur, Maharashtra | **July 2011 - April 2022.**
- Co-Supervisor for Ph.D. Candidates Dept of CSE, Sanjay Ghodawat University | **Dec 2022-Present.**
- Coordination of Postgraduate Programs: Overseeing the Department of Computer Science & Engineering's postgraduate curriculum and operations | **2018-19 to 2022-23.**
- Taught and contributed expertise in Operating Systems, Research Methodology, Computer Graphics, Distributed Systems, Advanced Computer Networks, Unix Operating Systems, Mobile Computing, among other subjects during an extended tenure.

Key Responsibilities and Achievement's

- UGC Nodal Officer of Institute for applying Autonomous for N K Orchid College of Engineering and technology.
- Department Establishment - Artificial Intelligence & Data Science (AI&DS).
- Local Selection Committee Member for Recruitment - Department of Computer Science & Engineering (CSE) and Artificial Intelligence & Data Science (AI&DS)
- Established two New Labs as Artificial Intelligence and Data Science
- Establishment of Google Student Developer Club (GSDC), NK Orchid College of Engineering, Founded and led the establishment of the GSDC, aimed at fostering a community of student developers, promoting technical learning, and facilitating collaboration on innovative projects.
- Coordinator and SPOC - Employability Skill Development Program Zensar Technologies, Pune. Acted as the coordinator and Single Point of Contact (SPOC) for Zensar Technologies for a 3-year Employability Skill Development Program.
- I was honoured with the Best Faculty award by NKOCET Solapur for exceptional performance during the Academic Year 2019-20.
- Recognized as the Best Reviewer at the ICDSA 2023 International Conference on Machine Learning and Big Data Analytics (ICMLBDA)

Scopus id:

<https://www.scopus.com/authid/detail.uri?authorid=56367561000>.

ORCID ID :

<https://orcid.org/0000-0001-7741-3645>.

PUBLICATIONS

| | |
|---------------|---------------|
| Total | 29 |
| Scopus | 14 |
| | +10(accepted) |
| Web of Sci | 03 |
| SCI | 01 |
| Peer Reviewed | 07 |

PATENTS

| | |
|-----------|------------|
| Granted | AUS-03 |
| | Germany-01 |
| Published | India-06 |

PROFESSIONAL DEVELOPMENT

| | |
|-------------------------|----|
| FDP attended by | |
| AICTE/ISTE/Professional | 28 |
| bodies | |
| Online Courses on | |
| NPTEL/Coursera/Udemy/ | 08 |
| Other Recognized | |
| Platforms | |

2023.

- Guided a noteworthy project titled "Nondestructive Grading Classification of Fruits," which was among the top 100 projects showcased to industries at the ConnectNext National Conference organized by La Foundation Dassault System in September 2020.
- Received the Innovation award from NKOCET Solapur for outstanding contributions during the Academic Year 2017-18.
- Participated in the Contest Guru of Inspire Faculty Excellence Award in 2015.
- Earned acknowledgment and appraisal from the management of NKOCET, Solapur, for delivering outstanding performance and contributions.
- Secured the second rank in M. Tech (Computer Science and Engineering) from BEC Bagalkot, showcasing consistent academic excellence
- Facilitation of International Academic Exchange: Organized and led the Athena Exchange Program between NTI Gymnasia Eskilstuna, Sweden, and NKOCET Solapur as an Event Coordinator

RESEARCH AND INNOVATION

Publications

Post-Ph.D. Contributions.

- Published an article entitled "GenConVit+: Advanced hybrid framework for deepfake detection for safeguarding digital media integrity" in Scopus indexed Journal of Integrated Science and Technology.
- Published an article entitled "Enhancing Cross-Linguistic Image Caption Generation with Indian Multilingual Voice Interfaces Using Deep Learning Technique" in Scopus indexed Science Direct Elsevier Procedia Computer Science.
- Received an acceptance "Security, Privacy and Communication efficiency in Federated Learning: Issues and Perspectives" Scopus indexed Algorithms for Intelligent Systems (Springer Book Series)- ICICDS 2024.
- Received an acceptance "Revolutionizing Interaction: Python-Driven Speech Assistant Powered by LSTM" at Scopus indexed Conference ETMDIT 2024.
- Published an article entitled " Revolutionizing Fashion: Fashion Era's Deep Convolutional Neural Network for Outfit Recommendations" at Scopus indexed International Journal of Intelligent Systems and Applications in Engineering.
- Published an article entitled "Multimodal Emotion Recognition Model via Hybrid Model with Improved Feature Level Fusion on Facial and EEG Feature Set" SCI/Scopus indexed Multimed Tools Appl (2024). <https://doi.org/10.1007/s11042-024-19171-2>.
- Published an article entitled "DRESCNN: Deep RESNET Convolutional Neural Network Based Classification of X-Ray Images for Detection of COVID-19" in Scopus/WoS indexed Journal of Electrical System.
- Published an article entitled "Frequent CNN based ensembling for MRI classification for Abnormal Brain Growth detection" Scopus Indexed Journal of Integrated Science and Technology, 12(4), 785.
- Published an article entitled "Improved Q-Reinforcement Learning Based Optimal Channel Selection in Cognitive Radio Networks" in Scopus Indexed International Journal of Computer Networks & Communications (IJCNC) Vol. 15, No. 3, May 2023.
- Published an article entitled "A secured IoT-based model for human health through sensor data", in Scopus Indexed Measurement: Sensors, Volume 24,2022,100516, ISSN 2665-9174, <https://doi.org/10.1016/j.measen.2022.100516>.
- Published an article entitled "A novel approach for optimization of handover mechanism using metaheuristics algorithms", in Scopus Indexed Measurement: Sensors, Volume 24,2022,100467, ISSN 2665-9174,

PERSONAL DETAILS

Father's Name: Baswaraj T. Patil

Mother's Name: Mahadevi Patil

Category: Open/GM

Cast: Hindu-Veera Shaiva Lingayat

Date of Birth: 02/05/1988

Gender: Male

Marital Status: Married.

Correspondence Address:

87/B62 OM SAI Residency, 5th Floor

Flat #10 Near Datta Mandir Bhavani

Peth Solapur, Maharashtra-413002

Permanent Address:

S/O: B T Patil,

At/Post: Sarasamba, TQ: Aland,

Dist: Kalaburagi, Karnataka-585302

<https://doi.org/10.1016/j.measen.2022.100467>.

- Published an article entitled "The Role Of Mathematics In Machine Learning" in Scopus-indexed International Journal of Data Acquisition and Processing, 2023.
- Received an acceptance for Article " FarmAI: AI-Driven Chatbot for Comprehensive Agricultural Assistance" in Scopus indexed Journal International Journal of Computing Vol 22 issue 03,2023 ISSN: 2312-5381.
- Published Article "Crop Leaf Disease Detection in Soybean Crop Using Deep Learning Technique" In: Pawar, P.M., et al. Techno-societal 2022. ICATSA 2022. Springer, Cham. https://doi.org/10.1007/978-3-031-34644-6_5.
- Received an acceptance for the Article "Challenges and advancement in Federated Recommendation System: A Comprehensive Review" Scopus indexed Springer Proceeding in Mathematics and Statistics presented at the 2nd International Conference on Data Science and AI (ICDSAI2023).
- Received an acceptance for the Article "Machine learning based classification of X-ray images using convolutional neural networks" Scopus indexed Springer Proceeding in mathematics and statistics presented in Advances in Machine Learning and Big Data Analytics - Key trends shaping the future of ML and Big Data Analytics (ICMLBDA2023).
- Received an Acceptance for Article "Real Time Conversion of American Sign Language using Convolutional Neural Network" Scopus indexed Springer Proceeding in mathematics and statistics presented 9th ICCM 2023.
- Received an Acceptance for Article "An Optimized CNN-Based Approach for Efficient Object Detection using YOLO" Scopus indexed Springer Proceeding in mathematics and statistics presented 9th ICCM 2023.

Pre-Ph.D. Contributions.

- Published an article entitled "Fractional squirrel-dolphin echolocation with deep belief network for network-controlled vertical handoff in a disparate and heterogeneous wireless network" SCI/Scopus/WoS Indexed International Journal of Communication Systems Wiley Online Library DOI: <https://doi.org/10.1002/dac.4893>.
- Published an article entitled "Fuzzy Based Network Controlled Vertical Handover Mechanism for Heterogeneous Wireless Network" in Scopus /Web of Science (WoS) International Journal of Elsevier Materials Today's DOI:<https://doi.org/10.1016/j.matpr.2021.06.364>.
- Published an article entitled "A network controlled vertical handoff mechanism for heterogeneous wireless network using optimized support vector neural network" Scopus indexed International Journal of Pervasive Computing and Communications, Emerald Publishing Limited DOI: <https://doi.org/10.1108/IJPC-07-2020-0089>.
- Published an article entitled "Location-based Pomegranate diseases prediction using GPS". In: Scopus indexed Saini, H.S., Sayal, R., Govardhan, A., Buyya, R. (eds) Innovations in Computer Science and Engineering. Lecture Notes in Networks and Systems, vol 171. Springer, Singapore. https://doi.org/10.1007/978-981-33-4543-0_40.
- Published an article entitled "A Survey on vertical handover in Heterogenous Wireless Network" in Scopus Indexed Springer Progress in Advanced Computing and Intelligent Engineering vol 1198. Springer, Singapore. https://doi.org/10.1007/978-981-15-6584-7_27.
- Published an article entitled "Vertical Handoff in Future Heterogeneous 4G Network" in Web of Science (WoS) indexed IJCSNS International Journal of Computer Science and Network Security, VOL.11 No.10, October 2011.
- Published an article entitled "A Novel Hybrid Technique With Optimization For Enabling QoS For Network Controlled Vertical Handoff Mechanism In Heterogonous Network" in Scopus indexed IET-IEEE Digital

explorer DOI: 10.1049/icp.2022.0628.

- Published an article entitled "Real-Time Detection of Face Mask and Social Distancing" Scopus indexed In Iyer, B., Crick, T., Peng, SL. (eds) Applied Computational Technologies. ICCET 2022. Smart Innovation, Systems and Technologies, vol 303. Springer, Singapore. https://doi.org/10.1007/978-981-19-2719-5_33.

Peer Reviewed/Refereed Journals

- Presented an article "The cloud solution for mobile applications using MPaaS" at the IEEE conference International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC) on 28th -29th January 2018 in Priyadarshini Engineering College at Vaniyambadi in Vellore District, TamilNadu.
- Published an article entitled "Android Based Application for Fruit Quality Analysis" in the peer-reviewed journal International Journal of Innovative Research in Science, Engineering and Technology Vol. 5, Issue 12, December 2016.
- Published an article entitled "Multicast Routing and Its Protocols" in (IJCSIT) Peer-reviewed International Journal of Computer Science and Information Technologies, Vol. 5 (5), 2014, 6345-6349.
- Published an article entitled "Job Search Engine Online Portal System Architecture", IEJRD - International Multidisciplinary Journal, vol. 6, no. 4, p. 4, Jul. 2021.
- Published an article entitled "Smart Pilgrim Center: IOT Based Security System At Pilgrim Center." Peer-reviewed indexed Journal Elementary Education Online, 2021 EEO. 2021; 20(4): 2100-2105 Doi: 10.17051/ilkonline.2021.04.240.

Books

- Published a research book entitled "Vertical Handoff in Heterogeneous 4G Networks: Mobility in future generation network" in LAP LAMBERT Academic Publishing with ISBN-10: 3659210358 ISBN-13: 978-3659210358.
- Published Book Entitled "Operating Systems" in a scientific international publishing house with ISBN:978-93-92992-82-7.

INNOVATION AND PATENTS

- Received a Grant for an International Innovation Patent entitled "Feed forward neural network combined with Extreme Machine Learning approach for large weather Data" from the Government of Australia.
- Received a Grant for the International Innovation Patent entitled "Future summer temperature average prediction from air data rate" from the Government of Australia.
- Received a Grant for an International Innovation Patent entitled "Multi-Dimensional Radio Resource Allocation Scheme to Cater the Fluctuations of network situation due to 5G real Time Traffic" From the Government of Australia.
- Received a Grant for an International Innovation Patent entitled "Intelligent System for Automatically Identifying Electric Vehicle Charging Voltage Using Artificial Intelligence & Machine Learning" from the Government of Germany.
- Filed and Published a Patent for innovation entitled "Drought Prediction from general circulation atmosphere model using Hybrid Data Mining Techniques" at the Government of India.
- Filed and Published a Patent for innovation entitled "Drought Prediction from general circulation atmosphere model using Hybrid Data Mining Techniques" at the Government of India.
- Filed and Published a Patent entitled "Automated Configuration of Hybrid IOT Mesh Network for Real-Time Logistics Tracking" at the Government of India.
- Filed and Published Patent "Hierarchical Reinforcement learning-based

channel selection for routing in cognitive radio networks" at the Government of India.

- Filed and Published a Patent for innovation entitled "Mixed Mode Wireless Network Design Using Fuzzy-Network Control Handover Mechanism" at the Government of India.
- Filed and Published a Patent for innovation entitled "Security Framework for 5G Networks" at the Government of India.

TECHNICAL ENGAGEMENTS & PROFESSIONAL MEMBERSHIPS

Membership & Affiliation:

- MISTE Life Member | Indian Society of Technical Education (ISTE) Member.
- IAENG Life Member | International Association of Engineers

Editorial & Reviewer Roles:

- Editorial Board Member | International Engineering Journal for Research & Development (ISSN 2349-0729)
- Engaged as an active reviewer for the renowned Springer Nature Measurement Sensor journal, contributing to maintaining the journal's high standards and quality publications.
- Acknowledged as an active reviewer for the Scopus Indexed Journal of Electrical Engineering and Informatics (IJEI) and the Journal of Autonomous Intelligence, contributing insights to peer-reviewed publications.
- Reviewer for AI & Data Analytics Journals.
- Recognized as a reviewer for the Journal on Data Analytics and Artificial Intelligence and PLOS ONE interdisciplinary journal, contributing expertise to further advancements in these domains.
- International Journal of Wireless Communication and Mobile Computing ISSN: 2230-1007 SCI publication group the USA.

Technical Committee & Reviewer Roles in International Conferences

- Technical Committee Member | Second International Conference on Mobile Computing, Wireless Communications, and Networks (September 2021, Dalian, China).
- Engaged as a reviewer for several prestigious international conferences, including the International Conference on Electronics, Communications, and Networks (Beijing University, China), and others focusing on machine learning, big data analytics, wireless communication, and mathematical sciences.
- Computational Intelligence in Management & Mathematics-Key trends: Proceedings of 9th International Conference on Computers, Management & Mathematical Sciences.
- North Eastern Regional Institute of Science and Technology (NERIST), National Institute Of Technology, Mizoram, India, 04-05 August 2023
Advances in Machine Learning and Big Data Analytics - Key trends shaping the future of ML and Big Data Analytics 29-30 May 2023
National Institute of Technology, Arunachal Pradesh, India.
- IEEE International Conference on Advances in Electronics, Communication, Computing and intelligent information systems.
- 5th International Conference on Computer & Communication Technologies (IC3T) , WARANGAL, INDIA, Bangalore, India
- The 3rd International Conference on Electrical, Computer and Energy Technologies, Cape Town, South Africa.
- 5th International Conference on Communication and Intelligent Systems, Jaipur, India.
- First International Conference on Emerging Research in Computing, Information, Communication, Artificial Intelligence and Machine

Learning, Bangalore India.

- International Conference on Computing for Science, Engineering and Artificial Intelligence CSUSB USA in collaboration with Lendi Institute of Engineering and Technology (A) India on Nov 17-18, 2023.

ACADEMIC & PROFESSIONAL ENGAGEMENTS

Faculty Development Programs (FDPs)

- Data Science with Python, 5-day online program, Jan 30th to Feb 3rd, 2023
- AI & ML, RPG Foundation's ESD program by Zensar Technology Pune, Feb 2022.
- AI and IoT for Precision Farming, AICTE-ATAL Academy, Jun 7th-11th, 2021
- Data Science Analytics and Visualization Tools, AICTE-ISTE approved, Nov 2nd to 7th, 2020 Workshops & Training:
- Guru Cool Program, IBM India University Relations, Emerging Technologies, Project Build-a-thon
- Universal Human Values in Technical Education, AICTE Workshop
- Artificial Intelligence & Machine Learning, CMR Engg College Hyderabad
- IoT and Automation, PDACE Kalburagi
- Introduction to Machine Learning, IIT Kharagpur

Online Courses:

- Completed courses on Python, Data Structures, and Fundamentals of Scalable Data Science by renowned universities on Coursera.
- Certification in Cloud Computing, Accreditation & Outcome-based Learning, and NBA-Accreditation by NPTEL.
- Received IBM Badge in "Fundamental of Scalable Data Science".
- Completed Udeemy courses in Python for Data Science and Network Simulator using NS2.

Resource Person:

- Research Grants and Patent at ISTE one week FDP at KBPCOE Satara. On 07/12/23.
- Research Methodology at 2 days FDP at BIGC Solapur on 25/05/24.

Other Engagements:

- Industrial Training in Renown Web, Solapur, to understand industrial requirements.
- Attended multiple ISTE workshops on Computer Programming, Database Management Systems, and Design of Algorithms conducted by IIT Bombay.

Technical Skills Proficiency

- Programming Languages: Python, R
- Tools & Technologies: IoT, Cloud Computing, NS2, Latex
- Concepts: Data Science, Machine Learning, Artificial Intelligence, Image Processing
- Certification & Recognition
- Certificate of Completion in various technology-oriented programs from reputable institutions
- Recognition via IBM Badge for proficiency in Scalable Data Science.