



# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

Constituent of Symbiosis International (Deemed University), Pune

(Established under Section 3 of the UGC Act of 1956 wide notification number F-9-12/2001-U-3 of Government of India). Re-Accredited by NAAC with 'A++' Grade



# Symbi Vation

Insight of Glimshim at SIT





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR



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# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

wishes

*Happy*

# BIRTHDAY!

**Hon'ble Dr. Vidya Yeravdekar**

Pro Chancellor Symbiosis international  
(Deemed University)  
& Principal Director, Symbiosis

We wish you happiness, good health, and continued success. Your tireless efforts and unwavering dedication to public service are truly commendable.





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## From Director's Desk



It is with great pleasure that I welcome you to Symbiosis Institute of Technology (SIT), Nagpur, an institution committed to excellence in education and innovation.

Established in 2021, SIT Nagpur inherits a legacy of quality education and a dynamic learning environment from Symbiosis International University, Pune. At SIT Nagpur, we believe in nurturing talent and providing a platform for students to excel in their chosen fields.

Our curriculum is designed to not only impart technical knowledge but also to foster creativity, critical thinking, and problem-solving skills. As you embark on this exciting journey with us, remember that you are part of a global family.



Institute Building





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Leadership Board



**Dr. S.B. Mujumdar**  
Founder & President



**Dr. Vidya Yeravdekar**  
Pro Chancellor &  
Principal Director



**Dr. Ramakrishnan Raman**  
The Vice Chancellor



**Dr. Nitin Rakesh**  
Director and Professor

## Editorial Board



**Dr. Pratik K Agrawal**  
Assistant Professor,  
SIT Nagpur



**Prof. Monali Gulhane**  
Teaching Associate  
SIT Nagpur

## Associate Editorial Board



**Dr. Sudhanshu Maurya**  
Associate Professor,  
SIT Nagpur



**Dr. Poorva Agrawal**  
Assistant Professor,  
SIT Nagpur



**Dr. Pradnya Borkar**  
Assistant Professor,  
SIT Nagpur



**Mr. Rishikesh Kumbhalkar**  
SRC President,  
SIT Nagpur



**Mr. Chintamani Choudhari**  
SRC Vice-President,  
SIT Nagpur



**Ms. Astha Chopade**  
SRC Member,  
SIT Nagpur



**Ms. Sankruti Nekar**  
SRC Member,  
SIT Nagpur





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## International Collaboration Activity



Symbiosis International (Deemed University) is thrilled to announce a ground breaking MOU with IOWA University USA, unlocking extraordinary opportunities for our engineering talent at SIT Nagpur.

Under this partnership, students will have the chance to pursue their Master of Science in Computer Sciences through an accelerated program. They will spend 7 semesters at SIT Nagpur and complete one semester (with a minimum of 9 credits) at Iowa State University. By completing 18 credits, they can obtain their MS degree in just 6 months, enabling them to save time and embark on a rewarding journey in the United States, with the opportunity to work for up to 3 years. All the students who opt for this from SIT Nagpur will also get lucrative merit - based scholarships from Iowa, further enhancing their educational experience and reducing financial barriers.



IOWA STATE UNIVERSITY





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Students Achievement

## Matter of Pride! Congratulations

to our ENTREPRENEUR for winning prize of

**Rs. 10000/-**

For START-UP, Legal Sahyogi at  
TiE U Pitching Competition Grand Finale at



Mr. Parth Choudhari



Mr. Rudra Amgaonkar



## Remarkable Internships



Arya Kashikar, Padhmanabh Wanikar, Lakshya Khanna, Srinivas Mahajan, and Aryan Partakke, have secured spots in the IIT Mandi summer research internship in Cyber Security & Machine Learning under the guidance of Sudhanshu Maurya



Paneri Fulbandhe, Gunjal Chauhan, Sharayu Kalambe, Divya Talole, Tanya Singh, Nakshatra Sawarkar, Dhairya Gudadhe have been selected for the prestigious Research Internship at SIT, Nagpur in collaboration with the Centre for Smart Information and Communication Systems, University of Johannesburg, SA under guidance of Dr. S. Pratap Singh





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Industry Interaction



Mr. Aditya Bhatia, Center Head, Tech Mahindra Nagpur, on May 2nd, 2024



Mr. Arvind Kumar, Esteemed Centre Head of TCS, on 25th April 2024



Mr. Joshua David MD, The India Campus Lead from Mphasis, on May 17th, 2024



Mr. Amit Kale, Associate Vice President, Engineering, Global Logic Nagpur, on 14th June 2024.



The Acquia India COE Talent Acquisition Team, Neha Sinha, Sonal Sharma, and Ekta Waghmare with TA Leader, Denise Lam, Vice President, Acquia, on 29th May 2024.







# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Placement Trainings



### Technical Skills & Programming skills:

We organize technical workshops focused on enhancing students' proficiency in core engineering subjects and emerging technologies

### Aptitude Skills:

Aptitude Test Preparation: We offer training programs to prepare students for aptitude tests commonly used by companies during recruitment. These programs cover topics such as quantitative aptitude, logical reasoning, and verbal ability.



Glimpses of Training and Placement Activities





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Youtubers' Meet



### Distinguished Guest



**Mr. Rishi Bhatnagar**  
President Lava International Ltd.



**Mr. Nitin Sachdev**  
President, delaPlex



**Ms. Shweta Berry**  
Director of Marketing & Head of Strategic Alliances, Aries Communication

### Faculty Coordinator

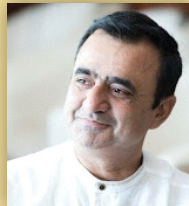


**Dr. Gagandeep Kaur**

### Distinguished Guest



**Surya Kahare**  
Channel: Techdose4u, 168K subscribers



**Dr. Rakshit Tandon**  
@Tandonrakshit, 2.32K subscribers



**Navin Reddy**  
Channel:Uncut, 21.8K subscribers



**Narendra Gowda**  
Senior Engineering Manager, Walmart Global Tech



**Dhaval Patel**  
Channel: Codebasics, 1.03M subscribers







# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Workshop Sky is limit for learning



The Research Cell, SIT, organized a workshop on cyber security for SIT students on April 20th & 22nd, 2024.



Intellectual Property Rights & IP Management Workshop Led by Dr. Priti Tayade (Gosavi),



Research Cell, SIT, Nagpur organised Product Development on 16th & 17th April, 2024 for SIT students.

**Celebrating World Intellectual Property Day**

**Expert Speakers**

- Madhusudhan Rao**, IASR, Department of Initial Engineering & Design, IIT Delhi
- Shri Divyanshu Mishra**, Assistant Controller of Patents and Designs, Patent Office Delhi

**TOPICS**

- Why Intellectual Property (IP) is Important
- How IP Benefits Innovators and Researchers
- Introduction to IP Copyrights (Patents, Copyrights, Tm, etc.)
- Administrative and Procedural Aspects of Patents
- IP Environment for Technology Entrepreneurs
- Case Studies

**DATE & TIME** 26 April 2024, 11:00 AM

<https://www.mic.gov.in>

Dr. P. V. Madhusudhan Rao Professor, Department of Mechanical Engineering & Design, IIT Delhi was an Expert Speaker for the "Celebration of World Intellectual Property Day" organized on 26/04/2024.





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Visits



## Social Activities



Symbiosis Institute of Technology, Nagpur, organized a seven-day summer boot camp from April 8 to April 17, 2024, at Shree Satya Sai Vidya Mandir School, Nagpur





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Funded Projects



Exploring the Effectiveness of Nature-based Solutions for Improving the Heat Stress Situation in Chandrapur region of Maharashtra, India.

Funded by



Principal Investigators/ Co-Principal Investigators



Dr. Latika Pinjarkar



Prof. (Dr.) Nitin Rakesh



Dr. Poorva Agrawal



Dr. Gagandeep Kaur

### Background

Urban areas, particularly in regions like Chandrapur in Maharashtra, India, face escalating challenges due to rising temperatures and heat stress intensified by climate change. Understanding the effectiveness of nature-based solutions in mitigating heat stress is imperative for sustainable urban development and public health.

### Project Outcome

- Improved Public Health and Well-being
- Knowledge Transfer and Capacity Building
- Policy Recommendations

### Significance

- To inform policymakers and urban planners. about the effectiveness of nature-based solutions in alleviating heat stress.
- By investigating these solutions, provides valuable insights that can guide the development of targeted interventions, ultimately enhancing community resilience and well-being in the region

# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Publications



Prof. (Dr.) Nitin Rakesh

- ❖ "Prototype Specification for a Speed Breaker to Generate Electricity," in Proceedings of the 2024 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024, 2024, pp. 0-10
- ❖ "An Evaluation and Comparison for Phishing Attack Detection using Machine Learning Approaches," in Proceedings of the 2024 3rd International Conference on Power Electronics and IoT Applications in Renewable Energy and its Control, PARC 2024, 2024, pp. 464-468.
- ❖ "Cluster computing-based EEG sub-band signal extraction with channel-wise and time-slice-wise data partitioning technique," Int. J. Inf. Technol. (Singap.), vol. 16, no. 5, pp. 2763-2773, 2024.
- ❖ "Novel blockchain-based framework to publish, verify, and store digital academic credentials of universities," Int. J. Inf. Technol. (Singap.), vol. 16, no. 5, pp. 3273-3281, 2024.
- ❖ "Sentiment analysis of product-based reviews using machine learning," in Proceedings of the International Conference on Artificial Intelligence, Blockchain, Computing & Security, ICABCS 2023, 2024, pp.230-234.
- ❖ "Effect of AI on the Financial Sector: Risk Control, Investment Decision-making, and Business Outcome," in Proceedings of the 2024 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024, 2024.
- ❖ "Green Cloud Computing for the Metaverse: Powering the Future of the Internet with Renewable Energy," in Proceedings of the 2024 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions), ICRITO 2024, 2024.



Dr. Latika Pinjarkar

- ❖ "Denoising of Digital Images Using Spatial Domain Edge Detection Approach," International Journal of Religion, vol. 5, 2024.
- ❖ "Forecasting Stellar XLM Prices: Insights from ARIMA Analysis," International Journal of Religion, vol. 5, 2024.
- ❖ "IoT-Based Smart Water Management System with Notification and Real-Time Data Analysis," in Proc. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Amity University, Noida, 2024.



# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR



**Dr. Sudhanshu  
Maurya**

- ❖ "Novel blockchain-based framework to publish, verify, and store digital academic credentials of universities," International Journal of Information Technology, vol. 16, 2024.
- ❖ "IoT-Based Smart Water Management System with Notification and Real-Time Data Analysis," in Proc. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Amity University, Noida, 2024.
- ❖ "Effect of AI on the Financial Sector: Risk Control, Investment Decision-making, and Business Outcome," in Proc. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Amity University, Noida, 2024.
- ❖ "Green Cloud Computing for the Metaverse: Powering the Future of the Internet with Renewable Energy," in Proc. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Amity University, Noida, 2024.
- ❖ "Advanced Direction-of-Arrival Estimation in Coprime Arrays via Adaptive Nyström Spectral Analysis," in Proc. 8th International Conference on Smart Trends in Computing and Communications (SmartCom-2024 by Springer Nature), Pune, India, 2024.



**Dr. S. Pratap Singh**

- ❖ "Diffusive molecular communication for bacterium propagation over human gut track," International Journal of Information Technology, vol. 16, 2024.
- ❖ "DMC Approach for Modeling Viral Transmission over Respiratory System," in Proc. Big Data Analytics in Astronomy, Science, and Engineering, 2024.
- ❖ "DMC Approach for Modeling Viral Transmission over Respiratory System," in Proc. Big Data Analytics in Astronomy, Science, and Engineering, 2024.



**Dr. Nilesh Shelke**

- ❖ "Security-aware analytical framework: A mathematical model and machine learning for dynamical system control in secure environments," Journal of Discrete Mathematical Sciences & Cryptography, vol. 27, 2024.
- ❖ "Machine intelligence security: A methodological blend of fuzzy logic in industry 4.0 algorithms," Journal of Discrete Mathematical Sciences & Cryptography, vol. 27, 2024.
- ❖ "Advanced Heart Disease Prediction: Deep Learning-Enhanced Convolutional Neural Network in the Internet of Medical Things Environment," Journal of Electrical Systems, vol. 20, 2024.
- ❖ "Navigating Industry 4.0 Frontiers: A Scalable and Resilient Next-Generation IoT Framework to Implement Future Advancements in Smart and Adaptive Industrial Systems," Journal of Electrical Systems, vol. 20, 2024.
- ❖ "Enhancing Security and Reliability in Industrial IoT Networks through Machine Learning," Journal of Electrical Systems, vol. 20, 2024.







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**Dr. Ramdas  
Khomane**

- ❖ "Separation of Cr and Mn by Polysulfone (PSF) based Ultrafiltration (UF) Membranes Anchored with Nanoparticles - Mathematical Analysis of Rejection Properties," Environmental Engineering Research, vol. 29, 2024.
- ❖ "Anemia detection and classification from blood samples using data analysis deep learning," Automatika: Journal for Control, Measurement, Electronics, Computing and Communications, vol. 65, 2024.
- ❖ "Comparative Analysis of Polarity of Text-based Sentiment Analysis," in Proc. IEEE 3rd International Conference for Innovation in Technology (INOCON), Bangalore, 2024.
- ❖ "Regression Model Selection for Life Expectancy Prediction: A Comparative Analysis of Imputation Techniques," in Proc. ICARC 2024 - 4th International Conference on Advanced Research in Computing: Smart and Innovative Trends in Next Generation Computing Technologies, 2024.



**Dr. Pratik Agarwal**

- ❖ "Ensuring data confidentiality and integrity in edge computing environments: A security and privacy perspective," Journal of Discrete Mathematical Sciences and Cryptography, vol. 27, 2024.



**Dr. Pramod Pandey**

- ❖ "Air Quality Index Prediction For Clearer Skies Using Improved Long Short Term Memory," Intelligent Decision Technologies, Accepted for publication.
- ❖ "Detection of Hydrocephalus in Brain Using Visual Geometry Group-16 Architecture," in Proc. Conference Proceedings, 2024.



**Dr. Pradnya Borkar**

- ❖ "Implementing end-to-end encryption strategist for strengthening data security across network communication" volumn 27(2) Scopus , WOS Journal of Discrete Mathematical Sciences and Cryptography <https://www.tarupublications.com/issues/issue-list/JDMSC/27/2-A>



॥ वसुधैव कुटुम्बकम् ॥



॥ वसुधैव कुटुम्बकम् ॥

# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR



Dr. Gagandeep Kaur

- ❖ "Automatic Customer Review Summarization Using Deep Learning-based Hybrid Sentiment Analysis," International Journal of Electrical and Computer Engineering (IJECE), vol. 14, 2024.



Prof. Monali Gulhane

- ❖ "Novel blockchain-based framework to publish, verify, and store digital academic credentials of universities," International Journal of Information Technology, vol. 16, 2024.
- ❖ "IoT-Based Smart Water Management System with Notification and Real-Time Data Analysis," in Proc. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Amity University, Noida, 2024.
- ❖ "Prototype Specification for a Speed Breaker to Generate Electricity," 2024 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2024, pp. 1-5.



Prof. Rajeshwar Balla

- ❖ "Alpha Node: Smart Data Retrieval System Using NS-3," in Proc. CONIT2024, 2024.

## Establishment of IIC Cell at SIT Nagpur





# SYMBIOSIS INSTITUTE OF TECHNOLOGY, NAGPUR

## Expert Talk



Dr. Pradnya Borkar

Guest Lecture on Fundamental Concept of Artificial Intelligence at one week faculty development program organised by Tulsiramji Gaikwad College of Engineering, Nagpur on 03/06/2024



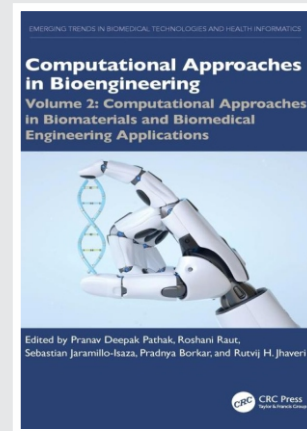
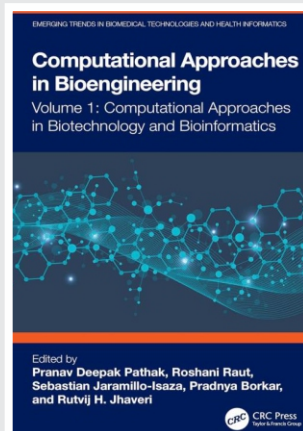
Prof. Monali Gulhane

Expert Session at NIT Raipur under the Centre for Continuing Education (CEC), is organizing a Certification Course on "Applied Data Analytics: A Practical Approach" from 12th June 2024 to 26th June 2024

## Patent Published



## Book Published

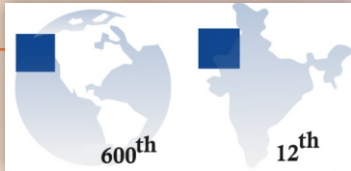




## SIU Rankings



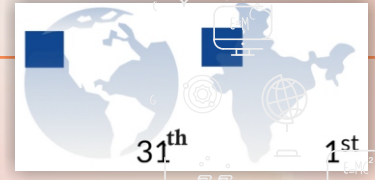
Computer Science and Information Systems



Ranked globally in the 641-650 range.



Ranked 31st in the world for Employer Reputation. Ranked 1st in India for Employer Reputation.



## SIU @ Dubai



Inauguration of Symbiosis International University, Dubai

# Symbiosis Institute of Technology

Wathoda, Nagpur - 440008

