

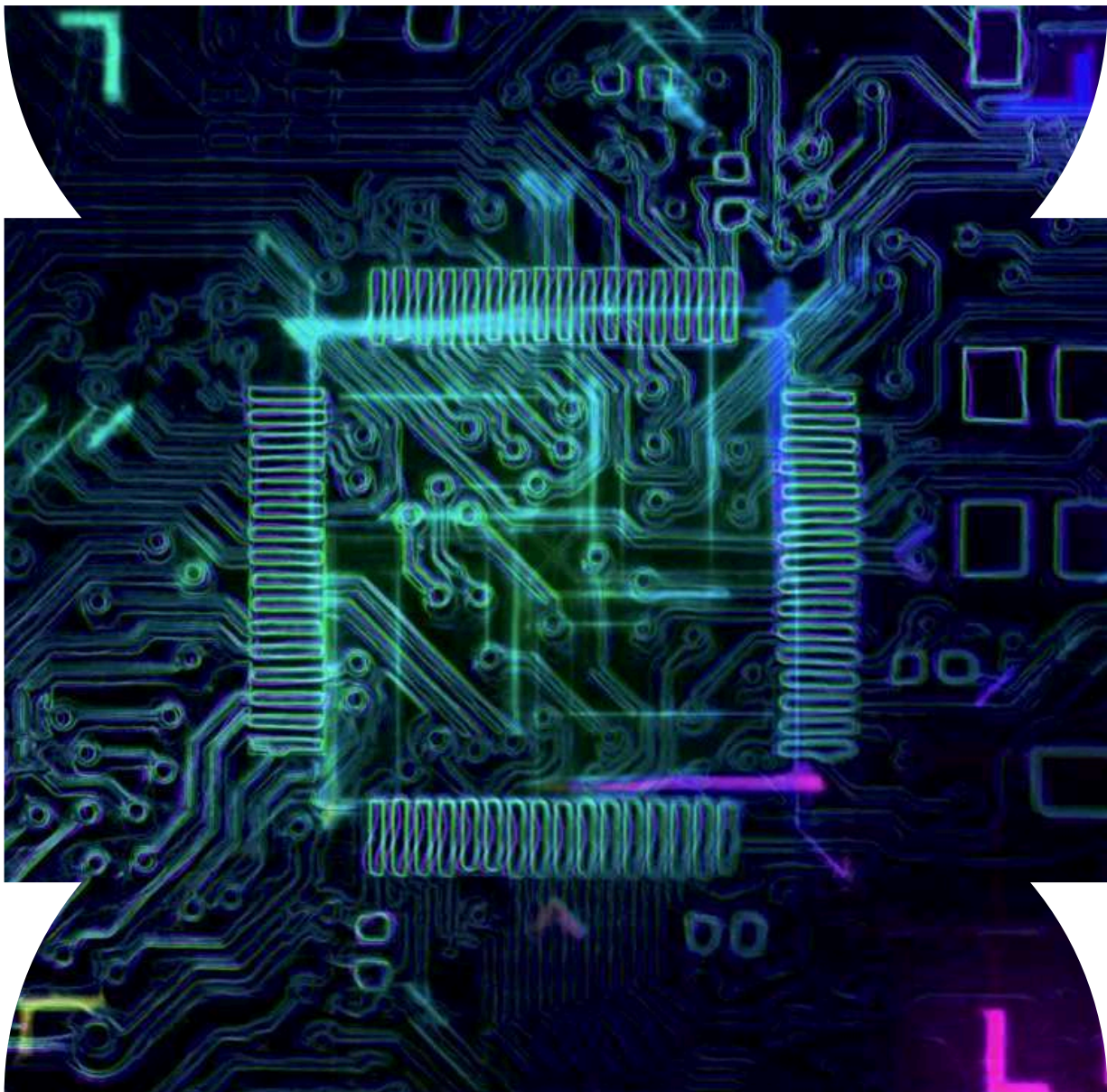


DEPARTMENT OF ARTIFICIAL
INTELLIGENCE AND MACHINE LEARNING

NEWSLETTER

Academic Year 2024-2025

July-December 2024





VISION OF THE INSTITUTE

To be a center of excellence for creation and dissemination of knowledge by imparting life skills and experiential learning for a promising future in the areas of engineering and technology.

MISSION OF THE INSTITUTE

- To promote professional ethics and experiential learning for better employability.
- To contribute towards knowledge generation and dissemination in the field of engineering.
- To address societal problems by promoting research, innovation and entrepreneurship.
- To develop global competencies amongst students by fostering value-based education.
- To strengthen industrial, Institutional, and international collaborations for synergetic relations.

VISION OF THE DEPARTMENT

To impart quality education with research insights for developing competent global engineers in the field of Artificial Intelligence and Machine Learning to solve societal problems.

MISSION OF THE DEPARTMENT

- To educate students on cutting-edge AIML technologies with strong industry connections to develop problem-solving capabilities, leadership, and teamwork skills.
- To produce quality research through national and international collaborations leading to publications, IPR, and sponsored/funded projects.
- To inculcate professional values with lifelong learning through curricular and co-curricular activities and create globally-aware citizens.

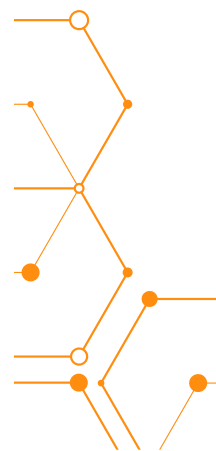


AI&ML DEPARTMENT

AI&ML Department Events



INDUCTION PROGRAMME



Pune, Maharashtra, India
Jeffkins Trips Private Limited, SCEI, 3rd floor, SIT building, Symbiosis International University, Law
Maharashtra-412116, India
Lat: 18.541624°
Long: 73.728066°



Start of the semester with an engaging induction programme for the 2024-2028 batch of AIML students and their parents. The Department of AIML conducted an induction programme to welcome the 2024-2028 batch and their parents. Dr. Shruti Patil, HOD, addressed the gathering and highlighted the department's vision and academic goals. Senior students extended a warm welcome, creating a friendly and inclusive atmosphere for the newcomers. Conducted two guest sessions from industry experts Dr. Arpita P Kathane & Dr. Paresh Chauhan

AI&ML DEPARTMENT

FINAL YEAR B.TECH PROJECTS WITH INDUSTRY MENTORS



The department of AI&ML have successfully conducted the project evaluations for our Final year B.Tech and M.Tech students. The event was enriched by the presence of esteemed industry experts who served as examiners. We are also glad to share that the students' projects, co-guided by CDAC, DRDO, Dassault Systèmes, Gofig, and few internship projects which received an excellent feedback.

AI&ML DEPARTMENT

Student Development Programme for Advanced Python and Data Structures

Student Development Programme conducted for Second-Year Students to level up their Python programming skills and for third year students Advanced data structures was organized.



Webinar conducted for Aspiring Engineers with AI CLUB

Department of AI and Machine Learning SIT Pune 's AI Club webinar for aspiring students was a fantastic success, filled with insightful discussions and fun games.



M.Tech Farewell 2022-2024

The Department of AI and Machine Learning conducted a farewell event for M.Tech AIML batch of 2022-2024 and honoured their academic achievements with certificates and mementos.



AI&ML DEPARTMENT



सी डेक CDAC | **SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE**

क्वांटम एक्सेलेरेटेड कंप्यूटिंग संगोष्ठी और कार्यशाला
Quantum Accelerated Computing Symposium and Workshop

15-16 अक्टूबर 2024 | 15-16 October 2024

Focus areas:

- Fundamentals of Quantum Mechanics
- Quantum Hardware Technologies
- Quantum Software Ecosystem
- HPC-based Quantum Accelerators
- Quantum Algorithm Design
- QSim Introduction and Hands-on session
- Quantum Machine Learning

Venue : Symbiosis Institute of Technology (SIT)
 Symbiosis International University, Near Lupin Research Park, Lavale, Mulshi, Pune Maharashtra-412115

प्रगत संगणन विकास केंद्र
 CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING

Media & Communication / CDAC/QAC 2024

Scan for Registration

National level symposium on Quantum Accelerated computing collaborated with CDAC INDIA.

The National level Quantum Accelerated Computing Symposium & Workshop, a joint initiative by C-DAC Pune and the Department of Artificial Intelligence and Machine Learning, SIT Pune, was held with great enthusiasm and participation from leading experts in the field of quantum computing and emerging technologies.



The event was graced by several eminent dignitaries including Dr. Uday Desai, Chancellor, Anurag University; Col. (Retd.) P. Sai Shankar from the National Quantum Mission, DST; Mr. Aditya Kumar Sinha, Director, C-DAC Patna; and Ms. Lakshmi Datar Panat, Convenor and Program Director AI-QT, C-DAC Pune. Their presence and inaugural addresses provided key insights into the future of quantum computing in India and set an inspiring tone for the sessions that followed.



SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
 DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Quantum Accelerated Computing Symposium and Workshop

Chief Guests

- Ms. Lakshmi Panat** (Convenor), Program Director, AI-QT, C-DAC Pune
- Aditya Sinha**, Director, C-DAC Patna
- Dr. Uday Desai**, Prof. Emeritus & Founding Director, II Hyderabad Chancellor, Anurag University
- Col. (Retd.) P. Sai Shankar**, VDMA Director (Signal), Indian Army
- Dr. Anon Kulkarni**, Dean & Director, SIT Pune

15th-16th October 2024

Convenor

- Dr. Shruti Patil**, HOD, Dept. of AIML

Speakers

- Dr. Kalyan Dasgupta**, Research Staff Member, IISc, India
- Prof. Anand Chakrabarti**, Professor and Director, A.I. Chemistry School at I.I.T., University of Calicut & Adj. Prof. IIT Delhi
- Prof. Anuram Ghosh**, Professor, IISc Bangalore
- Dr. Sanjay Sanjay**, Director, QISL-QT Lab
- Mr. Anil Saxena**, Scientist - E, C-DAC Pune
- Prof. Jayee Sinha**, Associate Professor, IIT Delhi
- Dr. Vidya Niranjan**, Professor & HOD, Nanotechnology, BV College of Engineering, Bangalore



AI&ML DEPARTMENT

LLMs and Generative AI

The Department of Artificial Intelligence and Machine learning organized an industry guest lecture with the speaker Mr. Aditya Rane, who is AI-ML Consultant at Google Cloud, shared invaluable insights on Large Language Models (LLMs) and GenAI to our third-year AI & ML students.

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
Industry Guest Lecture
LLMs and GenerativeAI

Guest Speaker
MR. ADITYA RANE
GEN AI SPECIALIST & AI CONSULTANT, GOOGLE CLOUD

DATE & TIME
22nd July, 2024
10.45 AM

SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)
(Established under Section 3 of the UGC Act, 1956) | Re-accredited by NAAC with 'A++' grade | Awarded Category - I by UGC

Engineering Innovation & AI

The Department of Artificial Intelligence and Machine learning organized an industry guest lecture with the speaker Mr. Jayesh Barve, who is Principle Scientist at GE Global research centre, to our third-year AI & ML students.

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
Invites for Guest Lecture
ENGINEERING INNOVATION AND AI

Guest Speaker
DR. JAYESH BARVE
PRINCIPAL ENGINEER (CONTROLS & OPTIMIZATION)
GE Global Research Center
Bangalore

DATE & TIME
19 JULY, 2024 09.30 AM

SYMBIOSIS_SIT SITLAVALE SITPUNE.EDU



AI&ML DEPARTMENT

AI&ML Industry Connect



Pune, Maharashtra, India
Symbiosis International, Pune, Maharashtra
411021, India
Lat 18.541693, Long 73.728419
04/25/2025 11:14 AM GMT+05:30
Note : Captured by GPS Map Camera



AI&ML DEPARTMENT



Inauguration of the Centre of Excellence with Rubiscape

Centre of excellence Inauguration with Mr. Sai Krishnan Mohan, VP, Data and Analytics, Bajaj Auto Ltd, as the Chief Guest, and Dr. Prashant Pansare, Founder & CEO of Rubiscape, as the Guest of Honour.



Industry-Institute Interaction session with Dr Amit Andre, Chief Executive Officer of The DataTech Labs

The insightful discussion centered around potential opportunities for internships, placements, and the possibility of Memorandum of Understanding (MoUs) between the institute and The DataTech Labs.



AI&ML DEPARTMENT

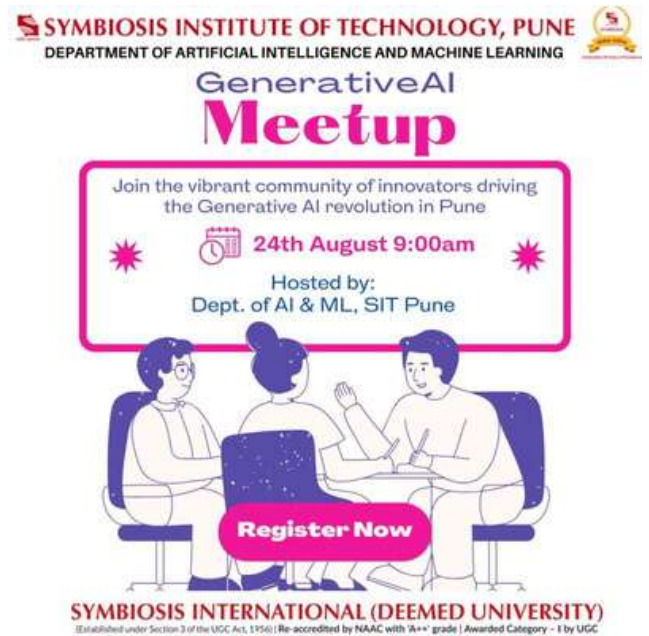


Memorandum of Understanding (MoU) with Dendrite.ai

The department of AI&ML and Dendrite.ai collaborated through MOU for skill development, innovative research opportunities, and academic-industry synergies, providing immense benefits to both students and faculty members.

Generative AI Meetup

Department of AI and Machine Learning SIT Pune and AI Club - SIT Pune is proud to host an exclusive and one-of-a-kind Generative AI and LLMs Meetup on Saturday, August at 9:00 AM. Vinit Gela, Co-Founder Unity Wealth: Agentic Workflows: Empowering AI Agents with LangGraph and Crew AI - Dr. Shruti Patil, Head of Dept, AI & ML, SIT Pune: Academic Initiatives in Generative AI. Rahul Kumar, Senior Software Engineer Newtuple Technologies: Navigating Search in Practical AI - Project Demo Sessions





AI&ML DEPARTMENT



Collaborative Research Discussion with Bajaj Automation LTD.

The Dept. of AI & Machine Learning, SIT Pune's collaboration with Bajaj Automation Ltd. for AI innovation in predictive analytics and cutting-edge research. MrRajeev Jorapur(Head-Management Information Systems), Dr. Sai Krishnan Mohan (VP-Management Information Systems), and their esteemed team for visited and participated in the discussion.

MOU with Voluntās

Voluntās and the Department of AI and Machine Learning SIT Pune have successfully signed a groundbreaking Memorandum of Understanding (MOU). This collaboration marks a significant step forward in our commitment to advancing research, innovation, and education in the field of Artificial Intelligence and Machine Learning.



AI&ML Internationalization





AI&ML DEPARTMENT

Product Design workshop conducted by Dr. Kate Sugden and Dr. Sylvia from Aston University

Department of AI&ML students achieved in the creative ideas using multicolor digital ring powered by Arduino in Product Design workshop conducted by Dr. Kate Sugden and Dr. Sylvia from Aston University

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

CONGRATULATIONS!

For the victory that has been achieved in the creative ideas using multicolor digital ring powered by Arduino in Product Design workshop conducted by Dr. Kate Sugden and Dr. Sylvia from Aston University

[SYMBIOSIS_SIT](#) [SITLAVALE](#) [SITPUNE.EDU](#)

Guest Lecture: Swarm Intelligence: Innovative Problem Solving and Research Directions

Dr. Jagdish Chand Bansal Associate Professor (Senior Grade), South Asian University, Chief Editor MethodX Journal, who delivered guest lecture on Swarm Intelligence: Innovative problem solving and research directions to our AI&ML students and faculty members.


SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Invites for

SWARM INTELLIGENCE: INNOVATIVE PROBLEM SOLVING AND RESEARCH DIRECTIONS

Guest Lecture by

Dr. Jagdish Chand Bansal
Associate Professor (Senior Grade),
South Asian University
Chief Editor MethodX Journal



KEY TOPICS COVERED:

- How to get published?
- Swarm Intelligence: Introduction and Research Directions.

12/07/2024
9:30 AM, Friday

[SYMBIOSIS_SIT](#) [SITLAVALE](#) [SITPUNE.EDU](#)

AI&ML DEPARTMENT



Discussion with Aalto University for Joint programs and Research for the students

Dr. Krithika Srinivasan and her team from Aalto University, had a discussion on joint programs and Research for the students in all our disciplines.

Collaboration discussion With Temple University, Philadelphia

Dr Anita Singh, Chair Professor, Temple University, Philadelphia visited the department of AIML for research and academic collaborations.



Semester Exchange Program at Ingolstadt University, Germany

The department of AIML students from 2021 Batch Mr. Lakshya Kaushik & Ms. Lavanya Sehgal and from 2022 Batch Mr. Dev Bhanshuli went to semester exchange program to Ingolstadt University, Germany



Lakshya Kaushik



Lavanya Sehgal



Dev Bhanushali

Selected for Semester Exchange Program at , Ingolstadt University , Germany



Student Success Stories: Celebrating Achievements



Scholarship Awarded 2024-2025 : Cummins Scholarship Program

Karne Karthikeshwar Reddy, a second-year AIML student at Symbiosis Institute of Technology, has been awarded the prestigious Cummins Scholarship for the academic year 2024-2025.



Secured 5th rank at BOROSA Hackathon '24

A team from the Department of Artificial Intelligence and Machine Learning at SIT Pune has secured the 5th rank in the prestigious BOROSA Hackathon '24.

Secured 1st Rank in AVINYA State-Level Project Competition/Exhibition

The AI & ML team from SIT Pune secured 1st place in the AVINYA State-Level Project Competition at D.Y. Patil Institute of Technology, showcasing their innovation and expertise.



Awarded a \$700 USD Travel Grant to attend the IEEE Summer School 2024 in Sri Lanka!

Kermi Kotecha, a final-year AI&ML student at Symbiosis Institute of Technology, has received a \$700 travel grant to attend the IEEE Summer School 2024 in Sri Lanka.



Patent Published for AI-Powered Healthcare Management System

Under the mentorship of Dr. Sachin Gaikwad, faculty member, our Department of AI&ML students has successfully published a patent for an AI-powered mobile application.



Won the 3rd position in the ImaGenAI competition at Tryst Fest, IIT Delhi!

The ImaGenAI team Second Year students Deepesh Shrivastava, Abhav Bhanot, Arva Shah, and Devansh Singh from SIT Pune's AI & ML department secured 3rd place at IIT Delhi, showcasing their innovation and technical skills.



Presenting research at the 2nd International Conference on Advancing Sustainable Futures 2024 in Abu Dhabi.

Aadith Sukumar, final-year AIML student at SIT Pune, presented his research on AI-based predictive maintenance for wind turbine blades at the 2nd International Conference on Advancing Sustainable Futures 2024 in Abu Dhabi. This project, was a collaborative effort between Symbiosis International University and United Arab Emirates University, with team members_ Kermi Kotecha,_Rawan Mubarak, and Aisha Aladawi, under the supervision of Dr.____Hany Alashwal, Dr.Harsh Dhiman, and Dr. Shruti Patil.



Awarded the 2nd place in the Build-a-Thon Hackathon Competition in the IEEE Education Society (EdSoc) Symposium

The team achieved 2nd place in the Build-a-Thon Hackathon Competition at the IEEE Education Society (EdSoc) Symposium hosted by IEEE SIT Pune (STB13901) at SIT- Symbiosis Institute of Technology.. Their innovative solutions and technical expertise set them apart in this competitive event, demonstrating their skills and dedication in the field.



📷 symbiosis_sit 📘 SITLAVALE 🌐 sitpune.edu

Selected for the Amazon ML Summer School 2024

Satya Prem, Hevardhan S, and Shubh Agarwal have been selected for the Amazon ML Summer School 2024, showcasing their expertise in machine learning. This opportunity highlights their dedication to AI and provides them with valuable industry exposure.

Secured the 3rd position in the ImaGenAI competition at Tryst Fest, IIT Delhi

Saeed Hudli has participated in two prestigious ACM events: the ACM Summer School 2024 for AI Compilers at PCCOE and the ACM India Women Grad Cohort at IIT Hyderabad.



Secured 1st place at the prestigious ML-Fiesta: AI/ML Hackathon

Advik Sharma and Meet Shah secured 1st place in the ML-Fiesta AI/ML Hackathon at Synergy'24, organized by IIIT Bangalore, winning a cash prize of Rs. 30,000.



Secured 1st Prize at Inter Institute Taekwondo Championship

Aditya Ramrame secured 1st position in the Under 63 kg category at the Inter Institute Taekwondo Championship, representing Symbiosis Institute of Technology. His performance reflects dedication, skill, and excellence in the sport.



SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE
Department of Artificial Intelligence and Machine Learning
CONGRATULATIONS!
Won 1st Prize at SymbiFit 9.0
Rewarded Rs.10K Cash

Ms. Kalyani Tewari,
B.Tech. AIML

social media icons: [symbiosis_sit](#), [SITLavale](#), [sitpune.edu](#)

The banner features a central image of Ms. Kalyani Tewari in an orange sports uniform holding a trophy, surrounded by other people. To the left is a circular portrait of her. To the right is a large number '1' with stars. The background is dark blue with gold and white text and graphics.

Secured the first position in the Female Individual Category at SymbiFit 9.0

Ms. Kalyani Tewari from the Department of Artificial Intelligence and Machine Learning at SIT Pune has won the first prize at SymbiFit 9.0. Her outstanding performance earned her a cash prize of Rs. 10,000, showcasing her dedication and talent.



Student Success Stories: Placements and Internships



AI&ML DEPARTMENT

Ritu Vishwakarma, Sridhar Subramanian, Yashashree S Mahale, Kunal Kulkarni, and Nida Khan have secured internships at John Deere. Their selection highlights their expertise in AI/ML and reflects the institute's dedication to providing students with outstanding industry opportunities.



Payas Deshpande has been selected for a prestigious internship at Dassault Systèmes, with a stipend of ₹30,000 per month. This opportunity will allow him to work on cutting-edge AI/ML technologies and gain valuable industry experience.

Meet Raychura has secured an internship at FEV Ltd. as part of the M.Tech (2023-25) batch. This opportunity will allow him to work on AI/ML technologies and gain hands-on industry experience.



Smita Vidhate has been selected for an internship at MG Motors as part of the M.Tech (2022-24) batch. This prestigious role will enable her to work on cutting-edge AI/ML projects, further strengthening her technical expertise in the automotive industry.

Soham Navale has secured an internship at KONE as part of the M.Tech (2023-25) batch. This opportunity will allow him to work on AI/ML technologies, gaining practical experience in innovative solutions within the industry.



AI&ML DEPARTMENT

Abhyuday Singh has been selected for a Junior Research Fellowship (JRF) at the Defence Research and Development Organisation (DRDO) in the domain of Computer Vision and Applied Artificial Intelligence. This prestigious opportunity will allow him to contribute to cutting-edge defense research.



Vaibhav Sunil Shirole has secured a Data Analytics Internship at Varroc, Pune. As an M.Tech AI/ML student, this role will provide him with practical experience in data-driven decision-making and analytics in the automotive sector.

Shlok Nandurbarkar has been selected for an internship at Keysight Technologies, offering a stipend of ₹65,000 per month. As part of the M.Tech (2023-25) batch, this role will provide him with hands-on experience in cutting-edge AI/ML applications, enhancing his technical expertise in the field.



AI&ML DEPARTMENT

Hemakshi Bhatnagar, Harsh Ratna, and Shivangi Singh have been selected for the Infosys Springboard AI First Internship. This opportunity will enable them to gain hands-on experience in artificial intelligence and machine learning while working with one of the leading IT companies.



Dhwani Bhavankar, Kalyani Tewari, and Ramitha V have secured a B.Tech internship as Technology Consultants at Microsoft. This prestigious opportunity will allow them to work on innovative projects and develop their expertise in AI and ML at one of the world's top technology firms.

Kartik Aggarwal and Jatin Lamba have been selected for a six-month B.Tech internship at Microsoft with a stipend of ₹28,000 per month. This opportunity will provide them with valuable industry experience and exposure to cutting-edge technology in artificial intelligence and machine learning.



AI&ML DEPARTMENT

Sahil Nagaralu, Kumar Rohit, and Yashasvi Agrawal have been selected as Trainee Data Engineers at StoneX, with an internship stipend of ₹30,000 per month and a competitive CTC of ₹10.04 LPA. This achievement highlights their expertise in data engineering and sets the stage for a promising career in the field.



Kermi Kotecha has been selected for a B.Tech placement cum internship at Philips Healthcare with a stipend of ₹45,000 per month. This opportunity will allow her to gain valuable industry exposure and contribute to healthcare technology advancements.

Priyanshu Gupta, Smriti Sinha, and Yashasvi Kanathey have been selected as Data Analysts at MIQ, Bengaluru, with an internship stipend of ₹40,000 per month and a competitive CTC of ₹13 LPA. This prestigious opportunity will provide them with hands-on experience in data analytics and machine learning at a leading technology-driven company.



Aadith Sukumar, Dhvani Parekh, Harsh Gandhi, Divyam Kumar, Apurva Patil, and Harsh Tripathi from Symbiosis Institute of Technology have been selected for a B.Tech placement cum internship at A.P. Moller - Maersk. They will receive a stipend of ₹50,000 per month and a CTC of ₹10.83 LPA. This opportunity provides them with valuable exposure in a globally recognized logistics and supply chain company.

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Sahil Nagaralu from Symbiosis Institute of Technology has been selected as a Product Development Engineer intern at Juspay. He will receive an internship stipend of ₹40,000, with a potential CTC ranging from ₹21 to ₹27 LPA. This role offers him hands-on experience in fintech innovation, allowing him to contribute to cutting-edge payment solutions.



Aadarsh Nayyer from Symbiosis Institute of Technology has been selected as an Operations Analysis Intern at Nasdaq. He will receive an internship stipend of ₹50,000. This opportunity provides him with invaluable exposure to financial markets and data analytics at one of the world's largest stock exchanges.



Jainil Hiren Patel got an international internship in Dexy AI , Wilmington, Delaware as a Full Stack Engineering Intern with a package of Rs 10,07,000.

Hemakshi Bhatnagar received an international internship in Sydney as a Technical Product Manager Intern at DataXLr8.ai





Faculty Achievements: Honoring Academic Contributions



Dr. Shruti Patil Recognized Among Top 5 Women Researchers by Springer Nature

Dr. Shruti Patil, H.O.D. and Associate Professor at Symbiosis Institute of Technology, has been recognized as one of the top five women researchers at Symbiosis International University by Springer Nature. This achievement highlights her contributions to research and her impact in the field of artificial intelligence and machine learning.



"Patent :NON-INVASIVE AI/ML-ASSISTED EEG SYSTEM FOR BINAURAL BEATS THERAPY FOR MENTAL HEALTH

Dr.Gargi Joshi Bhide has contributed to a patent titled "NON-INVASIVE AI/ML-ASSISTED EEG SYSTEM FOR BINAURAL BEATS THERAPY FOR MENTAL HEALTH", which was officially published in The Patent Office Journal. Key contributors to this innovative project include Neha Saini, Dr.Atul Kulkarni, FMASc Dr.Rahee Walambe, Vaibhav Tasgoankar, and Dr.Ketan Kotecha.

Invited keynote talk on "Responsible AI for Space Science" in Moscow

Dr. Shrutti Patil, for delivered an invited keynote talk on "Responsible AI for Space Science" at the 5th BRICS SciTech Conference held at RUDN University in Moscow.



Dr. Shilpa Gite's Invited Session on Advances in Deep Learning at KEOL, South Korea

Dr. Shilpa Gite was invited to deliver a session on "Advances in Deep Learning" at the Earth Observation Laboratory at Kangwon National University (KEOL), South Korea.

Dr. K. Nandhini Receives Best Paper Award at ICCUBEA-2024

Dr. K. Nandhini, faculty member, Department of AI&ML has received the Best Paper Award at the 8th International Conference on Computing, Communication, Control, and Automation (ICCUBEA-2024), organized by PCCOE, Pune.





Session on AI for Aviation Security at Pune Airport

Dr. Pooja Kamat, Assistant Professor (AI & ML), delivered a session on Artificial Intelligence for Aviation Security for CISF personnel at Pune Airport. The session focused on the application of AI in enhancing security measures, improving surveillance, and optimizing threat detection systems in aviation security.

Minor Research Project Grant Awarded

Dr. Shrikrishna Kolhar, Assistant Professor at Dept. of AI&ML, Symbiosis Institute of Technology, Pune, has received a Minor Research Project Grant of ₹1,30,000/- INR for his research on "Explainable AI for Phenotyping of Stress Resilient Plant Varieties."



SIU Sponsored Research Projects in AI & Machine Learning

Dr. Shruti Patil has developed an AI-driven system for monitoring attention span in Education 4.0. Dr. Pooja Kamat worked on AI-based fault detection in bearings using vibration and sound sensors. Dr. Prachi Kadam developed an Indian food image dataset for calorie calibration.



Patent Published: AI-Based System for Tomato Plant Disease Detection

A patent has been published on an AI-based compact system, CAPTOM, designed for classification and prediction of tomato plant diseases. Developed by Dr. Shivali Wagle, Dr. Harikrishnan R, and Dr. Ketan Kotecha, this innovation aims to enhance agricultural productivity by enabling early detection and diagnosis, helping farmers take timely action.



Young Leadership Award in AI-Driven Education

Dr. Shruti Patil was honored with the Young Leadership Award in AI-Driven Education at the World Education Summit 2024, Mumbai.

Empowering Businesses with AI Tools

Dr. Shruti Patil, Head of AI & ML Department and Research Associate at Symbiosis Institute, spoke at Femmicon 2024, an event dedicated to empowering women entrepreneurs. She shared insights on "AI Tools for Business Growth".



AI&ML DEPARTMENT

Top-Up Exploratory Grant from British Council

Dr. Ketan Kotecha, Director of SIT Pune, received a Top-Up Exploratory Grant from the British Council in collaboration with Aston University, UK. This grant recognized his efforts to advance international academic partnerships and research excellence.

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE



International Collaboration



Dr. Ketan Kotecha, Director, SIT Pune
Received Top Up Exploratory Grant from British Council in collaboration with Aston University, UK



Adjunct Professorship at Sunway University, Malaysia

Dr. Ketan Kotecha, Director of SIT Pune, was appointed as an Adjunct Professor at Sunway University, Malaysia. This esteemed position recognized his expertise and contributions to education and research.

International Collaboration in Research

Dr. Ketan Kotecha, Director of SIT Pune achieved a significant milestone by being appointed as a member of the Ph.D. Research Supervisory Board at Loughborough University, United Kingdom.





AI&ML DEPARTMENT



Visiting Professor at UCSI University

Dr. Ketan Kotecha, Director of SIT Pune, was appointed as a Visiting Professor at UCSI University, Malaysia, an institution ranked 284th globally in the QS World Rankings.

Participation in APAC Transforming Education & Skill Leadership Awards

Dr. Shruti Patil participated in the APAC Transforming Education & Skill Leadership Awards on 14th July 2023 at Hyatt Regency Pune. As a panelist, our representative contributed valuable insights on advancing higher education and bridging the gap between curriculum and careers.





International Blogs Published



MEDIUM BLOGS

Understanding AIML Predicates & Variables

Predicates and variables assume a huge part in making shrewd conversational specialists. In this article, we will examine exhaustively what predicates and variables are, the means by which they work, and how to involve them in AIML programming.

AI Club - SIT Follow 3 min read · Apr 3, 2023

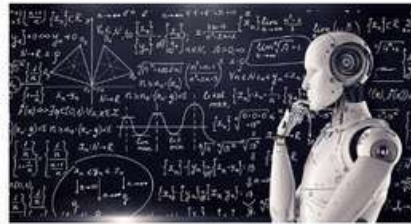


photo credit: p280k

What are predicates in AIML?

Predicates in AIML are basically key-est-eem matches used to address data or realities about the client, the chatbot, or the discussion setting. For instance,

Arbitrary Neural Style Transfer

Understanding and exploring an exciting application of CNNs called Neural Style Transfer. Written by [om varshney](#)

AI Club - SIT Follow 7 min read · Apr 17, 2023



What is Neural Style Transfer

Neural style transfer is an optimization technique used to take two images: a *content* image and a *style reference* image (such as an artwork by a famous painter) and blend them together so the output image looks like the content image, but "painted" in the style of the style reference image.

This is implemented by optimizing the output image to match the content statistics of the content image and the style statistics of the style reference image. These statistics are extracted from the images using a convolutional network.

Example



What is Semi-Supervised Machine Learning?

Learning more about Semi-supervised Machine Learning approaches to implement the strategy in your models. Written by AI Club Research Member [Sejal.Dubey Btech2022](#)

AI Club - SIT Follow 7 min read · Jul 25, 2023



Semi-supervised machine learning is a combination of supervised machine learning and unsupervised learning. In Supervised learning, with the labeled data, algorithms predict the label and then the difference between the prediction and the label can be calculated and minimized for accuracy.

Integrating External APIs With AI-ML Chatbots

Discover the power of integrating external APIs with AI and ML-powered chatbots to create personalized, efficient, and proactive interactions with customers, elevating the overall chatbot experience.

AI Club - SIT Follow 4 min read · Apr 10, 2023



Integrating Chatbots with Advanced AI (image credit: gettyimages.com)

Chatbots have become progressively well known throughout recent years. They are wise PC programs that can have discussions with people utilizing

Creating Basic AIML Categories and Patterns

Discover the fascinating world of AIML, an XML-based markup language that powers the development of artificially intelligent chatbots and virtual assistants. Learn how AIML's category, pattern, and template components work together to create more natural and engaging interactions with users and explore the potential for creating context-sensitive and personalized experiences. Written by [Roshan Kumar Yadav](#), from the Research & Documentation Committee of AI Club.

AI Club - SIT Follow 4 min read · Apr 24, 2023



Unsupervised Machine Learning — An In-Depth Overview

Unsupervised Machine Learning is one of the most commonly used Machine Learning modelling techniques as it has more relevance in real world applications. Read more about it in-depth in this article written by AI Club Research Member [Sejal.Dubey Btech2022](#)

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Unsupervised machine learning is a type of machine learning where an algorithm learns patterns, relationships or structures in data without actually defining any instructions or stating labels. In simpler terms, we are asking it to find patterns or make sense of the data on its own by giving a bunch of data. Thus, the goal of unsupervised learning is to find the principal structure of a given dataset, group that data according to



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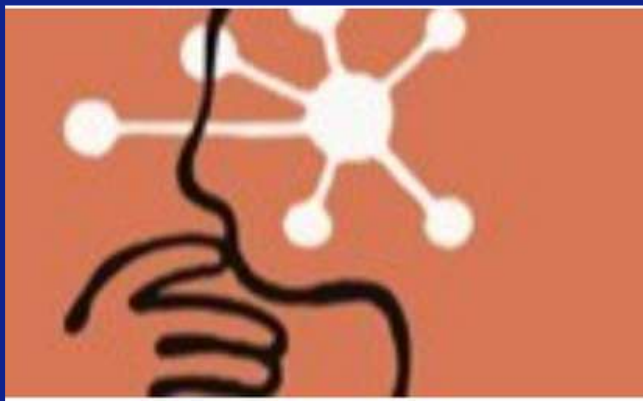


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